

DISTRIBUTED DATA COLLECTION (DDC) FOR REINSURANCE (RI) AND RISK ADJUSTMENT (RA): EDGE SERVER OPERATIONS MANUAL

December 5, 2017

**Health Insurance Exchange Program
Training Series**

Session Agenda

- Purpose
- Session Guidelines
- EDGE Server Timeline
- EDGE Server Announcements
- EDGE Server Operations and Maintenance Manual (O&MM): Overview
- Open Q&A
- Resources
- Closing Remarks

Purpose

- This External Data Gathering Environment (EDGE) server session will:
 - Provide a general overview of proposed updates to the EDGE Server Operations and Maintenance Manual (O&MM) Version 2.0, slated to be posted in the Registration for Technical Assistance Portal (REGTAP) Library in early 2018.
 - CMS is currently updating the O&MM. Prior to publishing the updated version, CMS would like input from issuers on the content currently included in the O&MM to make the document as useful as possible.
 - Issuers may submit their feedback to EDGE_Server_Data@cms.hhs.gov by the end of the day December 12, 2017.

Session Guidelines

- This is a 90-minute webinar session.
- For technical questions, please submit inquiries to:
EDGE_Server_Data@cms.hhs.gov.
 - Include EDGE server and the Health Insurance Oversight System (HIOS) ID in the subject line.
- For questions regarding logistics and registration, please contact the Registrar at: (800) 257-9520.

O&MM: Purpose

- The purpose of the EDGE application O&MM is to reduce the number of documents that issuers need to reference in order to operate and maintain their EDGE servers.
- Currently, REGTAP is the primary source for policy communications, business and technical documentation regarding the EDGE server.
- The O&MM is a consolidation of the currently published technical documents. It describes the information pertaining to the functional system design of the EDGE server. There are no changes to the processes and policies that exist in the documents currently published.

EDGE Server O&MM Proposed Changes

O&MM: Overview

- The O&MM provides the information necessary to operate and maintain the EDGE application.
- This document is used in conjunction with the EDGE server Interface Control Document (ICD) and the EDGE Server Business Rules (ESBR).
 - The ICD provides the technical specifications to create inbound eXtensible Markup Language (XML) files and receive outbound XML files.
 - The ESBR explains the EDGE application processing logic and requirements from a business operations perspective.




O&MM: Overview (continued)

The EDGE Server O&MM will provide issuers with the following benefits:

- More efficient and effective assistance for issuers when researching information. Issuers will no longer have to reference several documents for assistance.
- Reduces confusion on whether issuers are using the most current version of the document.
- Provides relevant information for both new and experienced issuers.

O&MM: Overview (continued)

- A legend was added to explain the purpose of newly added symbols.

Convention	Description
Black highlighted in Gray: <ul style="list-style-type: none">Text	Black characters highlighted in Gray indicate a command that should be run at the Linux or MySQL command line.
Red highlighted in Gray: <ul style="list-style-type: none"><Text>	Red characters highlighted in Gray indicate text that needs to be replaced with a value custom to the issuer.
Blue and underlined: <u>Text</u>	Blue characters underlined indicate text that are hyperlinked to external documents or websites.
 	You must contact the indicated party, or perform the indicated steps, before proceeding. Indicates a critical step or warning. If this guidance is not followed, it will have an impact to current or future functionality.
	Indicates information an issuer should note. Although the information may not impact a command, EDGE application update, and/or EDGE reference data update.

O&MM: Highlights

- Section 1 – Introduction
 - This is the introductory section to the document. CMS added background information on the EDGE server application.
- Section 2 – System Overview
 - CMS added an overview of the EDGE server application, types of files generated and the two (2) server options available to issuers.
 - The functional system overview includes a section on file processing zones: Production, Test and Validation.
 - EDGE server system software specifications are also outlined in detail.

O&MM Highlights (continued)

- Section 3 – Provisioning & Set Up
 - This section includes system software specifications, types of users, directories and binary files used.
 - It also details the steps required to access the CMS EDGE server registration site and submit a request to provision an EDGE server.
- Section 4 – Operations
 - CMS added information on file processing, local and remote command execution, configuration management and application errors.
 - In addition, CMS added screenshots to accompany login and file processing screens.

O&MM Highlights (continued)

- Section 5 – Backup and Maintenance Procedures
 - CMS describes operational support and backup procedures for both Amazon Web Services (AWS) and On-Premise EDGE servers.
 - This section includes information on truncation procedures and requests along with screenshots of the EDGE Server Truncation Web Form.
- Section 6 – Reference Data
 - This section includes information on plan reference data and plan data reference sources in this section.
- Section 7 – EDGE Server Reports
 - This section includes information on detail and summary reports in this section as well as data quantity and quality evaluations.

O&MM FAQ

Q1. Who is the target audience for the O&MM?

A1. The target audience is both new and experienced issuers. It is a technical operations document, which includes policy, back up and data retention requirements relevant to all issuers.

Q2. When will the O&MM be published?

A2. CMS anticipates publishing the O&MM in the REGTAP Library in early 2018.

Q3. Where will the document be located?

A3. It will be located in the REGTAP Library under the Distributed Data Collection (DDC) for RI and RA/EDGE Program Area. It will also be located on the DDC Resource Page in the EDGE Core Resources section.

Q4. What will happen to the current individual documents on REGTAP?

A4. CMS will remove the current documents on REGTAP, for example copies of the current job aids, user guides and webinar slide decks. Issuers will have the ability to receive the original documents upon request.

O&MM FAQ (continued)

Q5. Will all the documents located in the REGTAP Library be consolidated into the O&MM?

A5. No. CMS intends to incorporate relevant information from published webinar slide decks into either the ESBR or the O&MM whenever possible so slide decks and other documents can be retired. Some documents such as the EDGE Server Timeline and temporary notifications will remain as separate publications.

Q6. How often will CMS update the document?

A6. CMS will update the O&MM as needed based on changes to current policies and EDGE server operations.

Q7. How will issuers know when the O&MM has been updated?

A7. CMS will distribute updates to the O&MM via a REGTAP announcement and/or announce them during an EDGE webinar session.

EDGE Server O&MM Table of Contents

O&MM: Table Of Contents

Below is the current table of contents for the O&MM:

1 Introduction

- 1.1 Conventions
- 1.2 Additional resources

2 System Overview

- 2.1 Functional System Overview
 - 2.1.1 System Overview
 - 2.1.2 Architecture
 - 2.1.3 System Software Specifications
 - 2.1.4 Application Users
 - 2.1.5 Application Directories
 - 2.1.6 Application Binary Files
- 2.2 Data Model & Dictionary

3 Provisioning & Set Up

- 3.1 EDGE Server Options
- 3.2 EDGE Server Management Console
 - 3.2.1 Accessing the ESM website
 - 3.2.2 ESM Roles
- 3.3 EDGE Server Contacts
- 3.4 Server Set Up – On-Premise
 - 3.4.1 Server Setup
 - 3.4.2 Server Registration
 - 3.4.3 On-Premise EDGE Server Provisioning
- 3.5 Server Set Up – AWS
 - 3.5.1 AWS Account Setup
 - 3.5.2 Request an AWS EDGE Server Instance
 - 3.5.3 Server Registration
 - 3.5.4 AWS EDGE Server Provisioning
- 3.6 Migration

O&MM: Table Of Contents (continued)

4 Operations

4.1 File Processing

- 4.1.1 EDGE Server Business Rules
- 4.1.2 Submitting Files for Processing – AWS EDGE Servers
- 4.1.3 Submitting Files for Processing– On-Premise EDGE Servers
- 4.1.4 File Ingest Validation Errors Missing
- 4.1.5 Detail Report Troubleshooting Steps

4.2 Commands

- 4.2.1 Local Commands
- 4.2.2 Remote Commands
- 4.2.3 Command Performance Configuration
- 4.2.4 Common Command Errors

4.3 Configuration

- 4.3.1 Edge.properties
- 4.3.2 My.cnf
- 4.3.3 Directory ownership
- 4.3.4 Storage Requirements
- 4.3.5 Automated Job Scheduling

4.4 Application Error Logging

- 4.4.1 Application Debug Level
- 4.4.2 Common Application Errors

5 Backup and Maintenance Procedures

5.1 Backup and Data Retention Policy

- 5.1.1 Backup Command
- 5.1.2 Pre-Step Checklist
- 5.1.3 Backup Command – AWS
- 5.1.4 Backup Command – On-Premise
- 5.1.5 Restoring from Backup Files

5.2 Disaster Recovery

- 5.2.1 Inform CMS of the Disaster Recovery Event
- 5.2.2 Recreate Server
- 5.2.3 Backup Restoration
- 5.2.4 Backup Verification

5.3 Annual Archive Process

- 5.3.1 Pre-Archive Steps
- 5.3.2 Archive Steps
- 5.3.3 Technical Assistance

5.4 Truncation Requests

5.5 Application and Software Stack Version Updates

O&MM: Table Of Contents (continued)

6 Reference Data

- 6.1 Global Reference Data
- 6.2 Plan Reference Data
 - 6.2.1 Updating Plan Data
- 6.3 Plan Data Queries

7 EDGE Server Reports

- 7.1 Data Quantity and Quality Evaluation
- 7.2 Interface Control Document
- 7.3 XSD and Example XML files

Appendix A: Enrollee File Ingest Job Error Messages

Appendix B: Pharmacy File Ingest Error Messages

Appendix C: Supplemental File Ingest Informational and Error Messages

Appendix D: Medical File Ingest Informational and Error Messages

Appendix E: Common Errors

Appendix F: Installer Policy Data

Appendix G: EDGE Server Reports and Local Commands

Appendix H: Referenced Documents

Questions?

To submit or withdraw questions by phone:

- *Dial “**star(*)**, **pound (#)**” on your phone’s keypad to ask a question.*
- *Dial “**star(*)**, **pound (#)**” on your phone’s keypad to withdraw your question.*

Upcoming Webinar

Webinar	Scheduled Event Date
EDGE Server Status Updates	December 12, 2017

Resources

Resources

Resource	Link/Contact Information
Center for Consumer Information and Insurance Oversight (CCIIO)	http://cms.gov/ccio/
Registration for Technical Assistance Portal (REGTAP) <ul style="list-style-type: none">• Registration• Resource Library• Frequently Asked Questions (FAQs)	https://www.REGTAP.info/

FAQ Database on REGTAP

My Dashboard



The FAQ Database allows users to search FAQs by FAQ ID, Keyword/Phrase, Program Area, Primary and Secondary categories, Benefit Year and Publish Date.

FAQ Database is available at
<https://www.regtap.info/>.

FAQ Search

FAQ ID Enter single FAQ ID or multiple IDs (1-10 or 15,18,87)

Keyword/Phrase

Program Area

Select All
ACA Financial Appeals
Agent Broker
Distributed Data Collection for RI and RA/Edge Server
Enrollment and Eligibility

Primary Category

Secondary Category

Benefit Year ?

Publish Date

Start Date

22

End Date

22

FAQs to Display: ?

- ☒ Current FAQs Only
☐ Retired FAQs Only
☐ All FAQs (Current and Retired)

Search

Clear Search

DDC/EDGE Server Resource Page


The DDC/EDGE Server Resource Page provides central access to job aids, announcements, documentation, FAQs, deadlines and other resources.

To access the DDC/EDGE Server Resource Page, click on the Program Area Pages icon on 'My Dashboard' or access the page at <https://www.REGTAP.info/ddc.php>.



Distributed Data Collection for RI and RA/Edge Server

[Get Adobe Reader](#)



Welcome to the Distributed Data Collection for RI and RA/Edge Server page designed to assist you with locating accurate and valuable information regarding External Data Gathering Environment (EDGE) server data submission.

CMS conducts the EDGE Server Webinar Series training sessions with the purpose of providing issuers with additional information related to data submission, testing, timelines, submission scenarios, and any additional guidance related to the data submission or blackout periods.

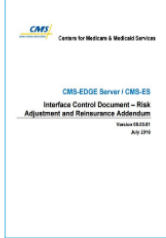
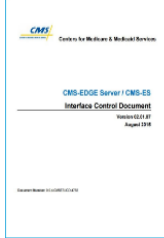
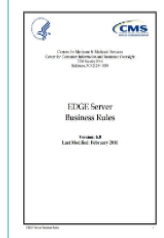
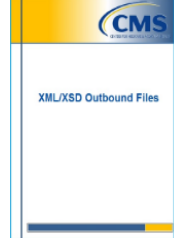
! IMPORTANT ANNOUNCEMENTS:

On June 10, 2016, there will be an EDGE server maintenance release which will update HHS-RADV sampling functionality. CMS will also release remote commands for preliminary HHS-RADV sampling reports. The reports will only be available to CMS.

TOPICS OF INTEREST

DATA SUBMISSION	ENROLLMENT SUBMISSION
MEDICAL SUBMISSION	PHARMACY SUBMISSION
REGISTRATION & PROVISIONING	SUPPLEMENTAL SUBMISSION

EDGE Core Resources

ICD Addendum 	Interface Control Document (ICD) 	Business Rules 	XML/XSD Outbound Files 
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EDGE Plan Data Templates Due 9/23/16

Days Left

6

Edge Server – Baseline Submission for 1st and 2nd Quarter 2016

NOVEMBER

2

Edge Server – Data Submission 90% of Enrollment Records / 25% of Medical & Pharmacy Claims for 1st and 2nd Quarter 2016

NOVEMBER

9

Edge Server Commands Deployed – ECS and Frequency Distribution Reports

NOVEMBER

10

DDC/EDGE Server Resource Page

(Continued)

TOPICS OF INTEREST

[DATA SUBMISSION](#)

[ENROLLMENT SUBMISSION](#)

[MEDICAL SUBMISSION](#)

[PHARMACY SUBMISSION](#)

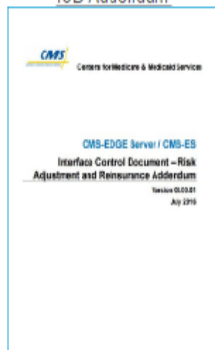
[REGISTRATION & PROVISIONING](#)

[SUPPLEMENTAL SUBMISSION](#)

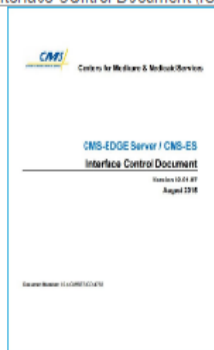
For quick access to related documentation, users can find resources organized by Topics of Interest, such as 'Medical Submission' or 'Registration'.

EDGE Core Resources

[ICD Addendum](#)



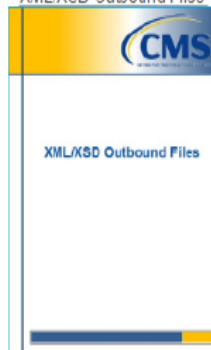
[Interface Control Document \(ICD\)](#)



[Business Rules](#)



[XML/XSD Outbound Files](#)



Users can also register for active EDGE Server training series, contact CMS, provide feedback and more.

NEW TO REGISTRATION?
click the button below

REGISTER
for next event session



DO YOU HAVE FEEDBACK?
click the button below

PROVIDE FEEDBACK
to DDC



Closing Remarks