



**IRS**  
**Modernized e-File (MeF)**  
**Service Request Guide**

**Final**

Version 3.0

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## Introduction

One of the most significant improvements MeF offers over its predecessor is the rapid processing of receipts and acknowledgements. Although receipt and acknowledgement generation depend on system load, MeF is engineered to adhere to expected response times as long as all transmitters follow the guidance provided in this document.

Most submissions will be receipted to the transmitter within two minutes or less.

-- During non-peak filing periods, customers can expect most acknowledgements to generate within five minutes of receipt of submissions.

-- During peak filing periods, customers can expect most acknowledgements to generate within two hours of receipt of submissions. During certain times, based on extreme load on the system, it can take up to 24 hours to get acknowledgements.

-- This is a great improvement over the previous system but achieving these results depends on all transmitters using this shared environment as described in this document.

## General Guidance

MEF service request architecture puts a limitation for concurrent services to be executed on a per session basis. For example you can call a GetNewSubmissions and have to wait for it to complete before you call another GetNewSubmissions else you will get a “Service count is over limit for SAML session” error.

You can have 5 sessions per ASID (Per SAML). If you open a sixth session you will get a Session Limit Reached error.

### Some facts on Sessions

- (a) There is a nightly batch job which clears all stale sessions from the system.
- (b) There can be up to 5 sessions per ASID, and each session tied a specific SAML.
- (c) A session may not be valid after 10 hours of client idle time.
- (d) If the client sends a Logout within 10 hours, the Logout will be successfully authenticated and would be able to clear that session from the database. If it fails then the reaping will clear it when it hits the 24 hour cycle.
- (e) If client sends a logout to a session who's SAML is expired this logout will fail and the session will remain stale in the DB till our cleaning script kicks in and clears the session.

### Session IND:

If you are running a web service in a single step with no intention to create a session then the sessionInd would be “N”. For example I could run a Get service either signing it or passing username/password and in the process I could either choose to create/persist a session or not.

# Transmitters

## 1. Retrieving Acknowledgements

MeF strongly **recommends** all transmitters use the **Get Acks service** and not the Get New Acks service. Get Acks is the most efficient service in the family of Get Acknowledgement requests because it supplies MeF the submission ids of the acknowledgements. Get Acks can be run in multiple sessions using the same ETIN with no reduction in efficiency.

We have noticed a number of transmitters executing this request within seconds of transmitting submissions. Back in 2012 when this document was originally written there were instances of up to 85% of Get Acks returning no acknowledgements because the submissions are still being processed. This filing season the percentage dropped to 41% but it is still in everyone's best interest to reduce the number of requests that return no acknowledgements to 10% - 15% of all acknowledgement requests

Transmitters should take into account the response times mentioned above when retrieving acknowledgements:

## 2. Federal Acknowledgements

- (f) Wait at least two minutes (non-peak) and longer (peak) after transmission of submissions to retrieve federal acknowledgements.
- (g) Keep retrieving acknowledgements until you encounter a request that returns no acknowledgements.
- (h) Once you encounter a request that returns no acknowledgements, wait two minutes before attempting to retrieve again.
- (i) Add 30 seconds between requests until a five minute interval is reached.
- (j) Continue requesting acknowledgements at five minute intervals.
- (k) At any time during this process, (c) through (e), once acknowledgements are returned continue retrieving them until you encounter a request that does not return any.
- (l) Then repeat the process of increasing intervals.
- (m) Do not request acknowledgements for federal returns once all acknowledgements have been retrieved.
- (n) Requesting acknowledgements when you have already retrieved them all is a waste of system resources and is something the IRS will be focusing close attention to in order to maintain system stability.

### ***3. State Acknowledgements***

- (a) **Wait 12 to 24 hours to retrieve an acknowledgement for a state return.**
- (b) States must retrieve state returns from MeF, process the returns, and return the state acknowledgement to MeF.
- (c) This process takes much longer to complete compared to federal returns.
- (d) Transmitters should not be treating the federal and state acknowledgement retrieval process equally.

### ***4. Don't Keep Requesting the same State Acknowledgement***

- (a) If after 24 or 48 hours you have still not received a state acknowledgement, cease attempting to retrieve it.
- (b) Request its status using Get Submissions Status.
- (c) If the most recent status is "Received" send a note to mefmailbox@irs.gov.
- (d) If the most recent status is "Ready for Pickup," the state has not retrieved the state return. Call the state and tell them to retrieve the returns. Give them the submission ids.
- (e) If the most recent status is "Sent to State," the state attempted to retrieve the returns but may have had problems doing so. Call the state and supply them the submission ids. Have them retrieve using the Get Submissions service instead of Get New Submissions.
- (f) See Publication 4164 for a complete list of statuses.

### ***5. Separate Federal and State Acknowledgement Retrievals***

- (a) Because of different turnaround times for federal and state acknowledgements, federal acknowledgements retrievals should be separated from state acknowledgement retrievals.
- (b) Consider creating separate sessions for retrieving federal and state acknowledgements.
- (c) If you chose to use one session for both, still separate federal acknowledgement retrievals from state acknowledgement retrievals. **Do not retrieve federal and state acknowledgements in the same request.**
- (d) Separating them empowers transmitters to vary the time interval between requests separately for federal and state acknowledgements.

- (e) It also empowers transmitters to turn one off one when all acknowledgements have been retrieved while continuing to request the other.

If you are using **Get New Acknowledgments** in addition to the above guidance, please follow these additional rules:

- (a) Look at the More Available flag in the SOAP body of the response.
- (b) As long as the flag is set to true, loop around and keep retrieving until the flag is set to false.
- (c) Once the flag is set to false follow the procedures outlined in (1) above.

## 6. *Timeout Conditions*

Starting this year we have experienced timeouts for certain service requests during peak. Generally the delay is between the MeF portal and backend and if the timeout setting on the client side is too low then the connection is lost. If you encounter a timeout on SendSubmissions please perform a Get Submissions Status before resending the same submissions. The Get Submission Status will return the status for the SendSubmission request. If the status is not found then resend the Submission. This will prevent duplicate error conditions.

***MEF recommends a connection timeout setting of at least 10 minutes for all transmitters and States. For some instances such as large file send or receive this value can be increased to 30 minutes.***

*For A2A Toolkit Users – configure timeouts as below*

### **.NET (SDK)**

In the app.config file for .NET there is a place to set timeout value. The default setting is 2 minutes as follows:

```
<!--(1) Proxy timeout in seconds so 'value="600" ' would set the  
timeout to 10 mins -->  
    <add key="timeout" value="120"/>
```

### **JAVA (SDK and Client App)**

For the Java A2A toolkit, the timeout value is configured in file transport.properties

```
#Number of seconds to wait to receive response data once a connection  
has been established  
#Set to 0 (zero) for infinite timeout duration.  
read.timeout.seconds=120 # change this to 600
```

## States

### Retrieving Submissions

Because states do not normally know the submission ids of state submissions, states use the Get New Submissions service to retrieve submissions.

1. State submissions are batched into files each hour for each state.
2. Each file contains up to the configurable number of returns identified by the state prior to start-up or 200 if the state has not provided a number.
3. Separate files are created for each submission category (Corp, Part, EO, Ind, and Estrst).
4. State submissions are not available using this service until they are batched into files. This means you cannot pull the submission as soon as the transmitters send it to MeF. You must wait for it to be batched.
5. For a detailed list of File creation schedule and State specific configuration settings please refer to tables 1 and 2 at the end of this document.
6. Wait 10 minutes after your scheduled batch creation time to retrieve returns. This ensures the files have been created prior to retrieving.
7. Continue to perform Get New Submissions until the “Item Count = 0” and “More Available = false”
8. Once the Item Count = 0 and More Available flag is set to false cease retrieving returns.
9. Additional returns will not be available for retrieval until the next hour.
10. Once the flag is set to false, do not attempt to retrieve additional submissions using this service. To do so is to waste system resources. Wait until 10 minutes **after** your scheduled time next hour.
11. To prevent backlogs each state should retrieve all files each hour.
12. Since returns are batched once an hour no state should need to use multiple parallel sessions to retrieve available returns unless they cannot retrieve all of them within the hour.
13. If multiple sessions are needed we recommend you retrieve using a different submission category in each session (Corp, Part, EO, Ind, and Estrst).
14. However, if not all submissions in a category can be retrieved within the hour, then multiple sessions should be used for the same category.
15. Only one service request type can be executed at one time for a session. For example if running a Get New Submission, need to wait for it to finish before executing the second Get New Submissions else you will get a “Service count is over limit for SAML session” error.



16. States do not need to send Receipts for the submissions they pick up as long as they are sending Acks in a timely manner.

### Proper Use of Get Submissions By Msg ID

1. This is important yet underutilized state service.
2. When a **Get New Submissions** results in a timeout, or the response is not received or is lost after retrieval, the submissions cannot be retrieved using a second Get New Submissions.
3. Use **Get Submissions By Msg Id** to retrieve submissions that were not received or were received but lost.
4. When using **Get Submissions By Msg ID** place the message id of the Get New Submissions – the one for which the response was lost or not received -- in the appropriate element in the SOAP body of the Get Submissions By Msg Id request.
5. MeF will return the attachment (submissions) originally attached to the **Get New Submissions** Response. You can then process the submissions.
6. By running **Get Submissions By Msg Id** every time a Get New Submissions response is lost or not received, states can retrieve all outstanding submissions.
7. **It is imperative states retain the message ids** of their service requests, especially their Get New Submissions service requests, so they can be reused when necessary.
8. **Do not use the Reconciliation List/Get Submissions service combo** to identify and retrieve submissions lost when executing Get New Submissions. Get Submissions Reconciliation List was not designed for this purpose and Get Submissions is an inefficient way to retrieve many submissions.

### Proper Use of Get Submission Reconciliation List

1. Most states misuse this request.
2. The Reconciliation List/Get Submissions service combo should not be used to identify and retrieve submissions lost when using Get New Submissions. Use Get Submissions By Msg ID to re-retrieve those submissions.
3. However, states should still run Reconciliation List regularly to identify any outstanding submissions – those that might have fallen through the cracks.
4. Any submissions appearing on the reconciliation list will continue to appear on it until they are retrieved and receipted.

5. **Note: Even when the more available flag is set to true, you will continue to retrieve the same submission ids (and not the next ones) until the submissions on the list are retrieved and receipted.**
6. Therefore we recommend states execute Reconciliation as follows:

```
Repeat
  Get Submission Reconciliation List
  If list not empty
    Get Submissions
    Store Submissions
    Send Receipts
  EndIf
Until More Available Flag = False
```

7. The above algorithm returns a list of submissions and the submissions are retrieved, stored, and receipted. The next call to Reconciliation list returns a new set of submissions. This repeats until there are no more submissions that meet the criteria.
8. Starting Release 9 in 2013, we added the "TotalNumber" element to the response for Get Submission Reconciliation List so that states could retrieve the total number of submissions themselves.
9. For reconciliation list options and explanation – please see Reconciliation List Options at the very end of this document.

### **Get Submissions:**

1. Get Submissions pulls submissions directly from the MeF database.
2. Because submissions are stored as CLOBs in the database, retrieval is inefficient.
3. This is another reason why states should not use the Reconciliation List/Get Submissions service combo as their main method of retrieving submissions that Get New Submissions failed to retrieve.
4. Maximum allowed for this type of request is 50.

### **Service (SOAP) Responses**

1. Each service request returns a response.
2. It is the state's (and transmitter's) responsibility to check each response and determine if it was successful or failed.
3. For example, a SOAP fault response to a login request means the login was unsuccessful.

4. Additional examples: A SOAP fault in response to Send Receipts or Send Acknowledgements means the receipts and/or acknowledgements were not accepted by MeF.
5. The response also contains error messages (Fault strings) that often give specific information about the cause of the error. For example, a Send Receipts service may have failed because the format of the timestamp in the receipt was invalid.
6. States (and transmitters) should save the message ids of SOAP Faults and provide them to IRS when seeking assistance in remedying the problem.
7. States can be setup as transmitters in ATS if they wish to test. Please send a request to [mefmailbox@irs.gov](mailto:mefmailbox@irs.gov) for this request.

## State Schedule for Creating Submission Batch Files

Table 1

State	Submission Categories for ATS	Submission Categories for Production	Schedule
Alabama	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	30 minutes past the hour
Alaska	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	0 minutes past the hour
Arizona	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	0 minutes past the hour
Arkansas	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	50 minutes past the hour
California	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	30 minutes past the hour
Colorado	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	10 minutes past the hour
Connecticut	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	20 minutes past the hour
Delaware	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	30 minutes past the hour
District of Columbia	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	40 minutes past the hour
Florida	Corp, Part, EO, Estrst	Corp, Part, EO, Estrst	0 minutes past the hour
Georgia	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	20 minutes past the hour
Hawaii	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	40 minutes past the hour
Idaho	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	10 minutes past the hour
Illinois	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	40 minutes past the hour
Indiana	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	50 minutes past the hour
Iowa	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	30 minutes past the hour
Kansas	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	0 minutes past the hour
Kentucky	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	50 minutes past the hour
Louisiana	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	40 minutes past the hour
Maine	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	20 minutes past the hour
Maryland	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	20 minutes past the hour
Massachusetts	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	20 minutes past the hour
Michigan	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	10 minutes past the hour
Minnesota	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	40 minutes past the hour
Mississippi	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	0 minutes past the hour
Missouri	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	40 minutes past the hour
Montana	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	10 minutes past the hour
Nebraska	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	20 minutes past the hour
New Hampshire	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	30 minutes past the hour
New Jersey	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	50 minutes past the hour
New Mexico	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	10 minutes past the hour
New York State	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	0 minutes past the hour

<b>State</b>	<b>Submission Categories for ATS</b>	<b>Submission Categories for Production</b>	<b>Schedule</b>
New York City	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	50 minutes past the hour
North Carolina	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	50 minutes past the hour
North Dakota	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	20 minutes past the hour
Ohio	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	40 minutes past the hour
Oklahoma	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	10 minutes past the hour
Oregon	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	20 minutes past the hour
Pennsylvania	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	30 minutes past the hour
Philadelphia	Corp, Part, Ind, Estrst	Corp, Part, Ind, Estrst	20 minutes past the hour
Rhode Island	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	50 minutes past the hour
South Carolina	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	10 minutes past the hour
South Dakota (really IRS Toolkit testers)	Corp, Part, EO, Ind, Estrst		Every 5 minutes
Tennessee	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	0 minutes past the hour
Texas (really RSI)	Corp, Part, EO, Ind, Estrst		10 minutes past the hour
Utah	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	30 minutes past the hour
Vermont	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	10 minutes past the hour
Virginia	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	30 minutes past the hour
Washington (really Strictly Software)	EO, Estrst		0 minutes past the hour
West Virginia	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	0 minutes past the hour
Wisconsin	Corp, Part, EO, Ind, Estrst	Corp, Part, EO, Ind, Estrst	40 minutes past the hour
Wyoming (really Fast Enterprises)	Corp, Part, Ind, Estrst		50 minutes past the hour

## Current Global Settings for States

Table 2

State / Catgy	max # subs	max file size (in bytes)	max file size
MDSTCORP	10	314,572,800	300 MB
MDSTPART	10	314,572,800	300 MB
MDSTEO	10	314,572,800	300 MB
MDSTIND	25	314,572,800	300 MB
MOSTCORP	40	104,857,600	100 MB
MOSTPART	40	104,857,600	100 MB
MOSTEO	40	104,857,600	100 MB
MOSTIND	40	104,857,600	100 MB
IASTCORP	60	104,857,600	100 MB
IASTPART	60	104,857,600	100 MB
IASTEEO	60	104,857,600	100 MB
IASTIND	60	104,857,600	100 MB
IDSTCORP	50	1,073,741,824	1 GB
IDSTPART	50	1,073,741,824	1 GB
IDSTEO	50	1,073,741,824	1 GB
IDSTIND	50	1,073,741,824	1 GB
PASTEO	1	104,857,600	100 MB
ORSTCORP	100	10,485,760	10 MB
ORSTPART	100	10,485,760	10 MB
ORSTIND	200	10,485,760	10 MB
FLSTCORP	20	104,857,600	100 MB
FLSTPART	20	104,857,600	100 MB
FLSTEO	20	104,857,600	100 MB
NYSTCORP	200	524,288,000	500 MB
NYSTPART	200	524,288,000	500 MB
NYSTIND	200	524,288,000	500 MB
NYSTESTRST	200	524,288,000	500 MB
MESTCORP	5	104,857,600	100 MB
<b>Defaults:</b>	<b>200</b>	<b>104,857,600</b>	<b>100 MB</b>
<b>Max Value Allowed:</b>	<b>200</b>	<b>1,073,741,824</b>	<b>2 GB</b>

## Reconciliation List Options

a) Submission status in the Request Message is “**NORECEIPTNOACK**” or is not specified:

Has the State picked up the submission?	Has MeF received a receipt for the submission?	Has MeF received an acknowledgement for the submission?	Is the submission ID included in the Response?
Yes	No	No	Yes
Yes	No	Yes	No
Yes	Yes	No	No
Yes	Yes	Yes	No
No	No	No	No
No <sup>1</sup>	No <sup>1</sup>	Yes <sup>1</sup>	No <sup>1</sup>
No <sup>1</sup>	Yes <sup>1</sup>	No <sup>1</sup>	No <sup>1</sup>
No <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	No <sup>1</sup>

It doesn't matter what service (GetSubmission, GetSubmissions or GetNewSubmissions) the State used to pick up the submission

<sup>1</sup> = this scenario is not realistic because a State cannot send a receipt or an acknowledgement before they pick up the submission (and the MeF system enforces this sequence of steps)

b) Submission status in the Request Message is “**NOTRETRIEVED**”:

Did MeF receive the submission more than 1 hour ago?	Has the State picked up the submission?	Is the submission ID included in the Response?
Yes	Yes	No
No	Yes	No
Yes	No	Yes
No	No	No

It doesn't matter what service (GetSubmission, GetSubmissions or GetNewSubmissions) the State used to pick up the submission

c) Submission status in the Request Message is “**RECEIPTNOACK**”:

Has MeF received a receipt for the submission?	Has MeF received an acknowledgement for the submission?	Is the submission ID included in the Response?
No	No	No
No	Yes	No

Has MeF received a receipt for the submission?	Has MeF received an acknowledgement for the submission?	Is the submission ID included in the Response?
Yes	No	Yes
Yes	Yes	No

It doesn't matter what service (GetSubmission, GetSubmissions or GetNewSubmissions) the State used to pick up the submission