



2011

Modernized e-File (MeF) Application to Application (A2A) Toolkit



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MeF eChannel Support:
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Getting started

- ✓ You must complete an application to become an authorized eFile provider

<http://www.irs.gov/taxpros/providers/article/0,,id=222533,00.html>

- ✓ Designate someone to become a system enroller to setup the A2A account and system details following this link

http://www.irs.gov/pub/irs-utl/automated_enrollment_ae_external_user_guide.pdf

- ✓ You must acquire an IRS supported x.509 certificate to use A2A strong authentication.

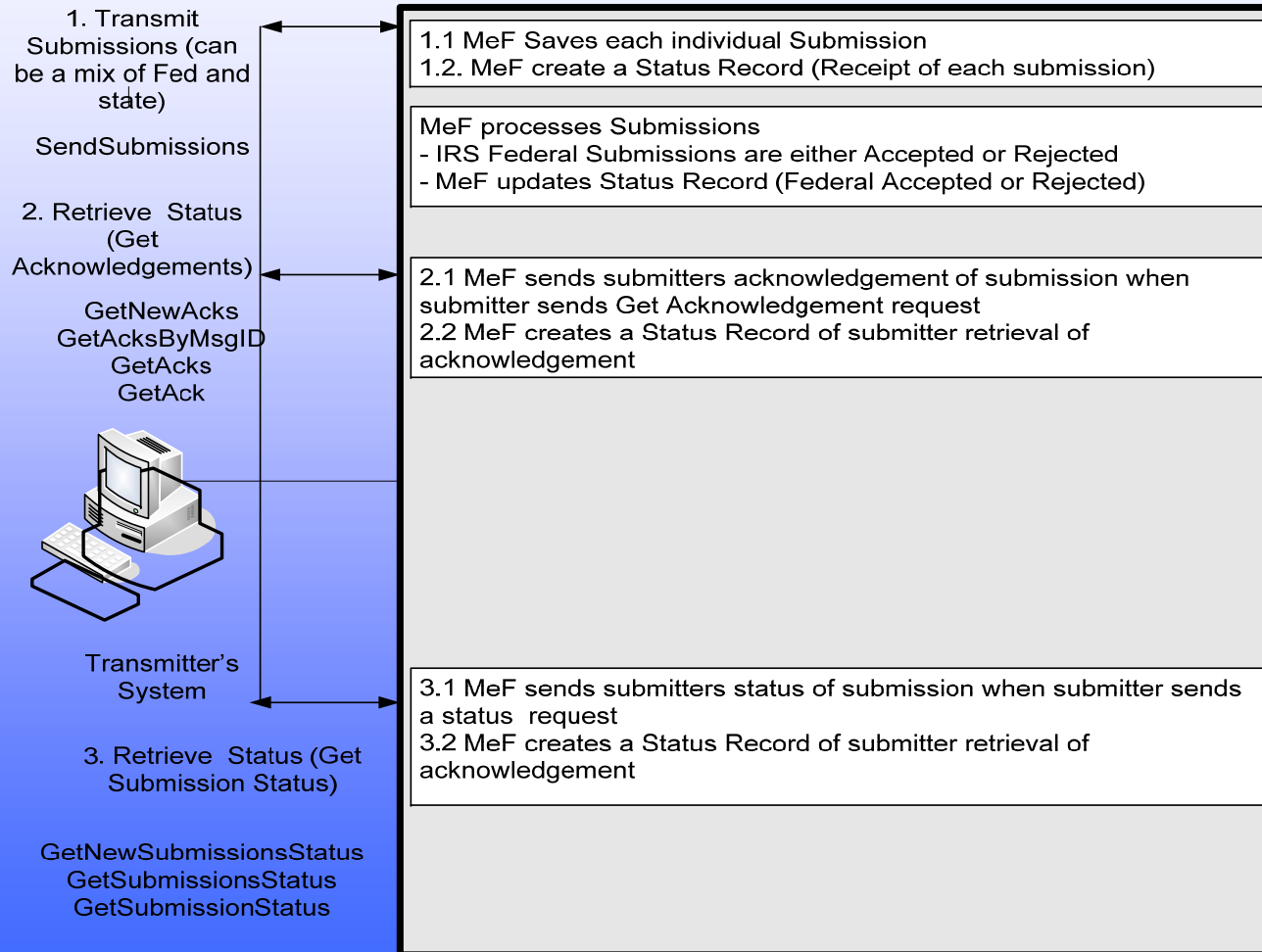
- ✓ The Strong Authentication Users Guide is included on the CD or can be obtained by contacting the mefmailbox@irs.gov

MeF Design

- ✓ All communications with MeF are done using SOAP (Simple Object Access Protocol) – IRS defined MeF web services
- ✓ MeF SOAP message are sent over the Internet using Secure Socket Layer (SSL). Security is implemented using
 - x.509 Public Key Infrastructure (PKI) Certificates (Strong Authentication)
- ✓ Returns (Submissions) are eXtensible Markup Language (XML) files transmitted using the web services (PDF attachments are supported)
- ✓ Messages are comprised of 1 to 100 returns (submissions)

MeF System Flow Federal

MeF System Flow Federal Only



MeF System State Flow

1. Transmit State Submissions
(can be a mix of Fed and state)

MeF System Flow State

1a. Transmitter submits state submission(s).
1b. MeF returns submission receipt(s) to transmitter.
1c. MeF records submission receipt status record.

2a. MeF denies submission and makes denial acknowledgement available to transmitter.
2b. MeF records "denied" status record.
OR (if not denied)
2a. MeF makes submission available to state.
2b. MeF records "Made Available" status record.

3a. State Retrieves state submission
3b. MeF records "Sent to State" status record.

4a. State sends state submission receipt to MeF
4b. MeF records "State Received" status record.

5a. State send state submission acknowledgement to MeF.
5b. MeF makes acknowledgement available to transmitter.
5c. MeF Records "Acknowledgement Received" status record.

6a. Transmitter retrieves acknowledgement.
6b. MeF records "Acknowledgement Retrieved" status record.

7a. State Retrieves Ack notification (date and time transmitter retrieved ack).
7b. MeF records "ack notification" status record.

3. State Retrieves
(Get Submissions)

4. State Transmits
Receipt of
Submissions
(Send Submission
Receipt)

5. State Transmit
Acknowledgements (Send
Acknowledgements)

7. Get New
Acknowledgement
Notifications (Get
Notifications)



Transmitter's System



State System

6. Retrieve Status
Records (Get
Submission Status)

MeF Service Messages

<i>MeF Service Request and Response Messages for A2A</i>	
<i>Modernized System Infrastructure (MSI) Services Messages</i>	
EtinRetrievalRequestMessage	
EtinRetrievalResponseMessage	
EtinStatusRequestMessage	
EtinStatusResponseMessage	
GetStateParticipantsListRequestMessage	
GetStateParticipantsListResponseMessage	
LoginRequestMessage	
LoginResponseMessage	
LogoutRequestMessage	
LogoutResponseMessage	
InitialLoginRequestMessage (For Password Clients)	
InitialLoginResponseMessage (For Password Clients)	
ChangePasswordRequestMessage (For Password Clients)	
ChangePasswordResponseMessage (For Password Clients)	
MeFFaultMessage	

MeF Service Messages

MeF Service <i>Request and Response Messages for A2A</i>	
<i>State Services Messages</i>	<i>Transmitter Services Messages</i>
GetAckNotificationRequest	GetAckRequest
GetAckNotificationResponse	GetAckResponse
GetAckNotificationsRequest	GetAcksRequest
GetAckNotificationsResponse	GetAcksResponse
GetNewAckNotificationsRequest	GetAcksByMsgIDRequest
GetNewAckNotificationsResponse	GetAcksByMsgIDResponse
GetNewSubmissionsRequest	GetNewAcksRequest
GetNewSubmissionsResponse	GetNewAcksResponse
GetSubmissionRequest	GetNewSubmissionsStatusRequest
GetSubmissionResponse	GetNewSubmissionsStatusResponse
GetSubmissionsRequest	GetSubmissionsStatusRequest
GetSubmissionsResponse	GetSubmissionsStatusResponse
GetSubmissionsByMsgIDRequest	GetSubmissionStatusRequest
GetSubmissionsByMsgIDResponse	SendSubmissionsRequest
SendAcksRequest	SendSubmissionsResponse
SendAcksResponse	MeFException

MeF Service Messages

MeF Service Request and Response Messages for A2A	
State Services Messages	Transmitter Services Messages
SendSubmissionReceiptsRequest	
SendSubmissionReceiptsResponse	
GetSubmissionReconciliationListRequest	
GetSubmissionReconciliationListResponse	
MeFException	

Implementation details for the MeF Services are in the MeF State and Trading Partners Guide http://www.irs.gov/pub/irs-utl/mef_state_and_trading_partners_icd_ref_guide_-_1-7-11.pdf

Why Use the Client Application and / or the A2A Toolkit?

- ✓ **Reduce YOUR time, cost and complexity for using MeF**
 - Provides built-in code for web services layer
 - Provides built-in logging capabilities for debugging
 - Provides built-in Strong Authentication capabilities
- ✓ **Writing your own code to use MeF is the most time consuming, costly and complex**

A2A Toolkit Basics

The disk contains

- Transmitter Client application code with documentation
 - State Client application code with documentation
 - Java and .Net SDK code with documentation
 - Support for Multipurpose Internet Mail Extensions (MIME) & Message Transmission Optimization Mechanism (MTOM) for Java developers and MTOM for .NET developers
 - Key reference documents and links
 - This presentation
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- ✓ To get the disk you must agree to license terms and provide required information about your business
 - ✓ When the WSDLs change, the Toolkit version must also be revised. Watch for information about Toolkit revisions on the MeF Status page
<http://www.irs.gov/efile/article/0,,id=168537,00.html>



Your Development Steps

- ✓ Returns (Submissions) must be XML formatted as defined in the Submission Composition Guide http://www.irs.gov/pub/irs-utl/ad-edd_ibm_r5_mef_submission_composition_guide_v1_3.pdf
- ✓ Follow the current version of IRS published Web Service Definition Language (WSDLs) for submissions
- ✓ Decide on Development Options
 - Use the MeF Software Development Kit (SDK) – A Java 5.0 (or .NET) application that can be integrated with your custom code
 - Use the MeF Client application, state or transmitter
 - Write your own code to interface with MeF



Important Documents

- ✓ **Included on the CD**
 - **MeF State and Trading Partners Guide**
 - **MeF Submissions Guide**
 - **A2A Strong Authentication Guide**
 - **Automated Enrollment User Guide**
 - **Publication 4164 *Modernized e-File (MeF) Guide for Software Developers and Transmitters***
 - **List of approved Certificates**
 - **MeF State Gateway Application User Guide**
 - **MeF Transmitter Application User Guide**
 - **MeF Client SDK Installation Guide**
 - **MeF Client SDK User Guide**



Documents Sent by Request

- ✓ **WSDL updates (only for developers who do not use the Client App or the SDK)**
- ✓ **A2A Strong Authentication Users Guide**
- ✓ **List of Certificates**

Next Steps for You

- ✓ **Get a copy of the CD**
- ✓ **Register as a MeF User**
- ✓ **Develop code to generate appropriate XML for submissions**
- ✓ **Decide how to access MeF to send the XML**
 - **Write your own code integrating the MeF SDK toolkit**
 - **Use the Transmitter or State application**
 - **Write all your own code**



Additional Guidance

- **Modernized e-File (MeF) Program Information**
<http://www.irs.gov/efile/content/0,,id=171945,00.html>
- **Modernized e-File (MeF) Status Page**
<http://www.irs.gov/efile/article/0,,id=168537,00.html>
- **Modernized e-File (MeF) User Guides and Publications**
<http://www.irs.gov/efile/article/0,,id=171946,00.html>
- **Schemas & Business Rules**
<http://www.irs.gov/efile/article/0,,id=171950,00.html>



Questions ?

Send your questions to our new mail box that has been established mefmailbox@irs.gov. Please note the 1040mef@irs.gov is being phased out