XML Error Troubleshooting Guide
December 4, 2009

When MeF receives a return, it performs validations to ensure that the return is processable. The first validation is done by an XML parser. It checks that the data within the return meets the data structure defined by the XML schemas. If an error is found during this validation, the acknowledgement is generated to report the schema errors. If the return passes the XML validation, then it moves on to the Business Rule validation which checks the submission data logic.

The IRS will be using a new parser in 2010. The Java API for XML Processing (JAXP) enables applications to parse, transform, validate and query XML documents. The parser validates that the document complies with W3C Standards found at the following link http://www.w3.org/TR/xmlschema-1/.

XML errors are often difficult to understand. The table below is intended to provide assistance when XML error X0000-005 is received. The list below is not all encompassing. The examples are intended to assist in deciphering the XML error message and provide guidance on how to correct the error. In some cases, there are two error messages reported for one incorrect entry. This is because the rule violates the W3C specifications in more than one way.

Error ID	XPath	Error Message	Plain Language Explanation	Corrective Action
1	/ efile:Return[1] / efile:ReturnData[1] / efile:IRS1120Schedul eO[1] / efile:IRS1120Schedul eOPartII[1] / efile:FilersTxblIncmAp portionment[1] / efile:FilersTaxYearEnd [1]	The XML data has failed schema validation. cvc-pattern-valid. Value '200912' is not facet-valid with respect to pattern '[1-9][0-9] { 3 } \-.*' for type 'YearMonthType'.	The value "200912" does not meet the requirements for the FilersTaxYearEnd field (Schedule O, line 1).	If you entered 200912 in Schedule O, line 1, then change it to 2009-12. If the software generates the format for you, contact them to see what you need to do to correct the format.
2	/ efile:Return[1] / efile:ReturnData[1] / efile:IRS1120Schedul eO[1] / efile:IRS1120Schedul eOPartII[1] / efile:FilersTxblIncmAp portionment[1] / efile:FilersTaxYearEnd [1]	The XML data has failed schema validation. cvc-type.3.1.3. The value '200912' of element 'FilersTaxYearEnd' is not valid.	The value "200912" is not valid for FilersTaxYearEnd field. This error is related to error number 1. Error 1 did not conform to the cvc-pattern-validation. Error 2 did not conform to the cvc-type 3.1.3 validation.	If you entered 200912 in Schedule O, line 1, then change it to 2009-12. If the software generates the format for you, contact them to see what can be done to correct the format.

Error ID	XPath	Error Message	Plain Language Explanation	Corrective Action
3	/ efile:Return[1] / efile:ReturnData[1] / efile:IRS1120Schedul eO[1] / efile:IRS1120Schedul eOPartII[1] / efile:TxblIncmApporti onment[1] / efile:TaxYearEnd[1]	The XML data has failed schema validation. cvc-pattern-valid. Value '' is not facet-valid with respect to pattern '[1-9][0-9] { 3 } \-.*' for type 'YearMonthType'.	The value "200912" does not meet the requirements for the TaxYearEnd field (Schedule O, line 2).	If you entered 200912 in Schedule O, line 2, then change it to 2009-12. If the software generates the format for you, contact them to see what can be done to correct the format.
4	/ efile:Return[1] / efile:ReturnData[1] / efile:IRS1120Schedul eO[1] / efile:IRS1120Schedul eOPartII[1] / efile:TxblIncmApporti onment[1] / efile:TaxYearEnd[1]	The XML data has failed schema validation. cvc-type.3.1.3. The value '' of element 'TaxYearEnd' is not valid.	The value "200912" is not valid for TaxYearEnd field. This error is related to error number 3. Error 3 did not conform to the cvc-pattern-validation. Error 4 did not conform to the cvc-type 3.1.3 validation.	If you entered 200912 in Schedule O, line 2, then change it to 2009-12. If the software generates the format for you, contact them to see can be done to do to correct the format.
5	/ efile:Return[1] / efile:ReturnData[1] / efile:IRS1120[1] / efile:IRS1120Schedul eE[1] / efile:Officer[1] / efile:PercentTimeDevo tedToBusiness[1]	The XML data has failed schema validation. cvc-maxInclusive-valid. Value '100.00000' is not facet-valid with respect to maxInclusive '1.0' for type 'RatioType'.	The value 100.00000 is not valid for PercentTimeDevotedToBusine ss (Schedule E, line 1(c)). This field is Ratio Type so there can only be 6 positions in the field (plus the decimal).	If you entered 100.00000 in Schedule E, line 2, then change it to 100.000. If the software generates the format for you, contact them to see what can be done to correct the format.
6	/ efile:Return[1] / efile:ReturnData[1] / efile:IRS1120[1] / efile:IRS1120Schedul eE[1] / efile:Officer[1] / efile:PercentTimeDevo tedToBusiness[1]	The XML data has failed schema validation. cvc-type.3.1.3. The value '100.00000' of element 'PercentTimeDevotedToBusiness' is not valid.	The value 100.00000 is not valid for PercentTimeDevotedToBusine ss (Schedule E, line 1(c)). This field is Ratio Type so there can only be 6 positions in the field (plus the decimal). This error is related to error number 5. Error 5 did not conform to the cvc-max-Inclusive validation. Error 6 did not conform to the cvc-type 3.1.3 validation.	If you entered 100.00000 in Schedule E, line 2, then change it to 100.000. If the software generates the format for you, contact them to see what can be done to correct the format.
7	/ efile:Return[1] / efile:ReturnData[1] / efile:IRS1120Schedul eG[1] / efile:EntityInformation [1] / efile:EntityName[1]	The XML data has failed schema validation. cvc-complex-type.2.3. Element 'EntityName' cannot have character [children], because the type's content type is element-only.	The schema defines a required field (BusinessNameLine1) within the EntityName complex element. It was not present in the xml data.	Check with your software developer about what elements are defined for this complex element. This appears to be a software issue.
8	/ efile:Return[1] /	The XML data has failed schema	The schema defines a	Check with your software

Error ID	XPath	Error Message	Plain Language Explanation	Corrective Action
	efile:ReturnData[1] / efile:IRS1120Schedul eG[1] / efile:EntityInformation [1] / efile:EntityName[1]	validation. cvc-complex-type.2.4.b. The content of element 'EntityName' is not complete. One of ' { "http://www.irs.gov/efile":Busine ssNameLine1 } ' is expected.	required field (BusinessNameLine1) within the EntityName complex element. It was not present in the xml data. This error is related to Error 7. Error 7 violated the cvc-complex-type 2.3 validations. Error 8 violates the cvc-complex-type 2.4.b validation.	developer about what elements are defined for this complex element. This appears to be a software issue.
9	/efile:Return[1]/efile: ReturnHeader[1]/efile :PINEnteredBy[1]	Value 'John' is not facet-valid with respect to enumeration '[Taxpayer, ERO]'. It must be a value from the enumeration.	The schema requires the taxpayer to choose one of two valid values for PINEnteredBy field. The taxpayer entered "John". This is not one of the two available choices (Taxpayer or ERO).	Enter or select one of the two available choices for this element "Taxpayer" or "ERO". If your software does not allow you to enter or select one of these values, contact them for assistance.
10	/efile:Return[1]/efile: ReturnHeader[1]/efile :PINEnteredBy[1]	The XML has failed schema validation: cvc-type.3.1.3. The value 'John' of element 'PINEnteredBy' is not valid.	The schema requires the taxpayer to choose one of two valid values for PINEnteredBy field. The taxpayer entered "John". This is not one of the two available choices (Taxpayer or ERO). This error is related to Error 9. Error 9 violated the cvc-facet validation. Error 10 violates the cvc-type 3.1.3 validation.	Enter or select one of the two available choices for this element "Taxpayer" or "ERO". If your software does not allow you to enter or select one of these values, contact them for assistance.
11	ReturnData[1]/efile:IR S1120[1]/efile:Overpa ymentAmount[1]	The XML has failed schema validation:cvc-totalDigits-valid. Value '5456981234567899' has 16 total digits, but the number of total digits has been limited to 15.	The schema allows a total of 15 digits for the element "OverpaymentAmount". The field contained 16 digits.	The maximum number of digits allowed in the OverpaymentAmount field is 15 digits. Check the value in this field.
12	ReturnData[1]/efile:IR S1120[1]/efile:Overpa ymentAmount[1]	The XML has failed schema validation: cvc-type.3.1.3. The value '5456981234567899' of element 'OverpaymentAmount' is not valid.	The schema allows a total of 15 digits for the element "OverpaymentAmount". The field contained 16 digits. This error is related to error 11. Error 11 failed for cvc-totalDigits-valid. Error 12 failed for cvc-type 3.13	The maximum number of digits allowed in the OverpaymentAmount field is 15 digits. Check the value in this field.