Outlook Rules (.RWZ) File Format

1. Introduction

The Outlook Rules (.rwz) File Format is used to store exported Outlook rules.

A rules file is a series of variable-length records, called Rules which contain variable-length records. Rules are a series of variable-length records called Rule Elements which contain conditions, actions and exceptions.

1.1. Glossary

This document uses the following terms:

ASCII: The American Standard Code for Information Interchange (ASCII) is an 8-bit character-encoding scheme based on the English alphabet. ASCII codes represent text in computers, communications equipment, and other devices that work with text. ASCII refers to a single 8-bit ASCII character or an array of 8-bit ASCII characters with the high bit of each character set to zero.

big-endian: Multiple-byte values that are byte-ordered with the most significant byte stored in the
memory location with the lowest address.

globally unique identifier (GUID): A term used interchangeably with universally unique identifier (UUID) in Microsoft protocol technical documents (TDs). Interchanging the usage of these terms does not imply or require a specific algorithm or mechanism to generate the value.
Specifically, the use of this term does not imply or require that the algorithms described in [RFC4122] or [C706] must be used for generating the GUID. See also universally unique identifier (UUID).

little-endian: Multiple-byte values that are byte-ordered with the least significant byte stored in the memory location with the lowest address.

timestamp: A variant time is stored as an 8-byte real value (double), representing a date between January 1, 100 and December 31, 9999, inclusive. The value 2.0 represents January 1, 1900; 3.0 represents January 2, 1900, and so on. Adding 1 to the value increments the date by a day. The fractional part of the value represents the time of day. Therefore, 2.5 represents noon on January 1, 1900; 3.25 represents 6:00 A.M. on January 2, 1900, and so on. Negative numbers represent dates prior to December 30, 1899. The variant time resolves to one second. Any milliseconds in the input date are ignored.

UTF-16: A standard for encoding Unicode characters, defined in the Unicode standard, in which the most commonly used characters are defined as double-byte characters. Unless specified otherwise, this term refers to the UTF-16 encoding form specified in [UNICODE5.0.0/2007] section 3.9.

MAY, SHOULD, MUST, SHOULD NOT, MUST NOT: These terms (in all caps) are used as defined in [RFC2119]. All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2. References

1.2.1. Normative References

[MS-DTYP] Microsoft Corporation, "Windows Data Types".

[MS-OXCDATA] Microsoft Corporation, "Data Structures".

[MS-OXCMSG] Microsoft Corporation, "Message and Attachment Object Protocol".

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, http://www.rfc-editor.org/rfc/rfc2119.txt

[UNICODE5.0.0] The Unicode Consortium, "Unicode Default Case Conversion Algorithm 5.0.0", March 2006, http://www.unicode.org/Public/5.0.0/ucd/CaseFolding.txt

1.3. Overview

1.3.1. Rules Structure

A rules file is a structure that is used to store a list of rules into a single file or memory buffer. A rule consists of a list of conditions, actions and exceptions that are defined in this specification.

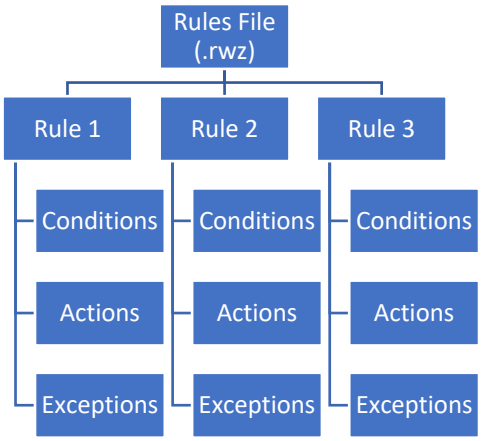

Figure 1: rules files

1.3.2. Byte Ordering

Data in the rules file are stored in **little-endian** format.

Some computer architectures number bytes in a binary word from left to right, which is referred to as **big-endian**. The byte numbering used for bitfields in this specification is big-endian. Other architectures number the bytes in a binary word from right to left, which is referred to as little-endian.

The byte numbering used for enumerations, objects, and records in this specification is little-endian.

Using the big-endian and little-endian methods, the number 0x12345678 would be stored as shown in the following table.

Byte order	Byte 0	Byte 1	Byte 2	Byte 3
Big-endian	0x12	0x34	0x56	0x78
Little-endian	0x78	0x56	0x34	0x12

2. Structures

Header
Rule 0
…
Rule N
Footer

Header (50 bytes): **RulesHeader** containing information that defines the characteristics of the rules file, including the number of rules it holds.

Rules (variable): An array of **Rule** objects of length **Header.Number of Rules**.

Footer (variable): **RulesFooter** containing information that defines the characteristics of the rules file, including timestamp information.

2.1. RulesHeader

The header for the top-level of the .rwz file. This structure contains information such as the number of rules contained in the file.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Signature (optional																														
Flags (optional)																														
Unknown1																														
Unknown2																														
Unknown3																														
Unknown4																														
Unknown5																														
Unknown6																														
Unknown7																														
Unknown8																														
Unknown9 (optional)																														
Number of Rules																														

Signature (4 bytes, optional): An unsigned integer that specifies the signature/version of the rule file. The format is "major * 100000 + minor/build". This field MUST NOT be present if the first four bytes of the file are 0x00000000.

Outlook Version	Decimal	Hex
Outlook 2019 (16.0)	1310720	0x00140000
Outlook 2007 (12.0)	1200000	0x00124F80
Outlook 2003 (11.0)	1100000	0x0010C8E0
Outlook 2002 (10.0)	1000000	0x000F4240
Outlook 2000 (9.0)	980413	0x000EF5BD

Flags (4 bytes, optional): An unsigned integer with unknown meaning. This field MUST NOT be present in Outlook 2000 and earlier versions.

Outlook Version	Decimal	Hex
Outlook 2019 (16.0)	101974016	0x06140000

Outlook 2007 (12.0)	101974016	0x06140000
Outlook 2003 (11.0)	68419584	0x04140000
Outlook 2002 (10.0)	51642368	0x03140000 or 0x06140000

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Unknown3 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Unknown4 (4 bytes): An unsigned integer with unknown meaning.

Unknown5 (4 bytes): An unsigned integer with unknown meaning.

Unknown6 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Unknown7 (4 bytes): An unsigned integer with unknown meaning.

Unknown8 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown9 (4 bytes, optional): An unsigned integer with unknown meaning. This field MUST NOT be present in Outlook 2000 and earlier versions.

Number of Rules (2 bytes): An unsigned integer that specifies the number of rules contained in the file.

2.2. Rule

An individual rule contained within the .rwz file.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Header (variable)																														
Rule Element 0																														
…																														
Rule Element N																														

Header (variable): RuleHeader contains information that defines the characteristics of the rules file, including its name, enabled status and the number of rule elements it holds.

Rule Elements (variable): An array of **RuleElement** values of length **Header.Number of Rule Elements.** Elements specify the type of messages to which the rule applies as well as the rule's conditions, actions and exclusions.

The observed order of elements is the apply rule element (0x00000190), 0x00000064, conditions, triggers, exceptions.

2.3. RuleHeader

The header for an individual rule contained within the .rwz file. This structure contains information such as the rule's name, enabled status and the number of rule elements it holds.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Signature (optional)																							Unknown1 (optional)							
Name (variable)																														
Enabled																														
Unknown2																														
Unknown3																														
Unknown4 (optional)																														
Unknown5 (optional)																														
Data Size (optional)																														
Rule Elements (optional)																							Unknown6 (optional)							
Separator (optional)																							Class Name Length (optional)							
Class Name (variable, optional)																														

Signature (3 bytes, optional): An unsigned integer that specifies the signature/version of the rule. This field MUST NOT be present in Outlook 200 and earlier versions.

Unknown1 (1 byte, optional): An unsigned integer with unknown meaning. This field MUST NOT be present in Outlook 2000 and earlier versions.

Name (variable): A **String** that specifies the rule's name.
Note: Outlook limits the length of this field to 255 characters.
Note: this field is a **String8** (ASCII) Outlook 2000 and earlier versions.

Enabled (4 bytes): An unsigned integer that specifies if the rule is enabled. 1 if enabled. 0 if disabled.

Unknown2 (4 bytes): An unsigned integer with unknown meaning.

Unknown3 (4 bytes, optional): An unsigned integer with unknown meaning.

Unknown4 (4 bytes, optional): An unsigned integer with unknown meaning. This field MUST NOT be present in Outlook 2000 and earlier versions.

Unknown5 (4 bytes, optional): An unsigned integer with unknown meaning. This field MUST NOT be present in Outlook 2000 and earlier versions.

Data Size (4 bytes, optional): An unsigned integer that specifies the length of the remaining data. This field MUST NOT be present if the file has no signature.

Number of Rule Elements (2 bytes): An unsigned integer that specifies the number of rule elements (conditions, actions, exceptions etc.) that the rule contains.

Separator (2 bytes, optional): An unsigned integer that specifies a separator. If this rule is the first rule, then this field MUST be 0xFFFF and the **Class Name Length** and **Class Name** MUST be present. If this rule is not the first rule, then this field MUST be 0x8001. This field MUST NOT be present if this rule is the last rule.

Unknown6 (2 bytes, optional): An unsigned integer with unknown meaning. Always zero.

Class Name Length (2 bytes, optional): An unsigned integer that specifies the length of the class name in bytes.

Class Name (variable, optional): An ASCII encoded string that specifies the rule's class name. Always "CRuleElement".

2.4. RuleElement

Rule elements specify a rule's conditions, actions and exceptions, e.g. "sent only to me", "mark as read", "except if sent only to me".

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Identifier																														
Data (variable)																														

Identifier (4 bytes): An unsigned integer that specifies the type of the rule element's data.

Data (variable): The rule element's data that depends on the value of **Identifier.**

Mandatory Rule Elements

Value	Description	Data
0x00000064	Unknown meaning	UnknownRuleElement0x64Data
0x00000190	"type of messages to which this rule applies"	ApplyRuleElementData

Conditions

Value	Description	Data
0x000000C8	"where my name is in the To box"	SimpleRuleElementData
0x000000C9	"sent only to me"	SimpleRuleElementData
0x000000CA	"where my name is not in the To box"	SimpleRuleElementData
0x000000CB	"from <people or public group>"	PeopleOrPublicGroupListRuleElementData
0x000000CC	"sent to <people or public group>"	PeopleOrPublicGroupListRuleElementData
0x000000CD	"with <specific words> in the subject"	StringsListRuleElementData
0x000000CE	"with <specific words> in the body"	StringsListRuleElementData
0x000000CF	"with <specific words> in the subject or body"	StringsListRuleElementData
0x000000D0	"flagged for <action>"	FlaggedForActionRuleElementData
0x000000D2	"marked as <importance>"	ImportanceRuleElementData
0x000000D3	"marked as <sensitivity>"	SensitivityRuleElementData
0x000000D7	"assigned to <category> category"	CategoriesListRuleElementData
0x000000DC	"which is an automatic reply"	SimpleRuleElementData
0x000000DE	"which has attachment"	SimpleRuleElementData
0x000000DF	"with <selected properties> of documents or forms"	WithSelectedPropertiesOfDocumentOrFormsRuleElementData
0x000000E0	"with a size <in a specific range>"	SizeInSpecificRangeRuleElementData

0x000000E1	“received <in a specific date span>”	ReceivedInSpecificDateSpanRuleElementData
0x000000E2	“where my name is in the Cc box”	SimpleRuleElementData
0x000000E3	“where my name is in the To or Cc box”	SimpleRuleElementData
0x000000E4	“uses the <form name> form”	UsesFormRuleElementData
0x000000E5	“with <specific words> in the recipient’s address”	StringsListRuleElementData
0x000000E6	“with <specific words> in the sender’s address”	StringsListRuleElementData
0x000000E8	“with <specific words> in the message header”	StringsListRuleElementData
0x000000EE	“through the <specified> account”	ThroughAccountRuleElementData
0x000000EF	“on this computer only”	OnThisComputerOnlyRuleElementData
0x000000F0	“sender is in <specified> Address Book”	SenderInSpecifiedAddressBookRuleElementData
0x000000F1	“which is a meeting invitation or update”	SimpleRuleElementData
0x000000F5	“from RSS feeds with <specified text> in the title”	StringsListRuleElementData
0x000000F6	“assigned to any category”	SimpleRuleElementData
0x000000F7	“from any RSS feed”	SimpleRuleElementData

Actions

Value	Description	Data
0x0000012C	“move it to the <specified> folder”	MoveToFolderRuleElementData
0x0000012D	“delete it”	SimpleRuleElementData
0x0000012E	“forward it to <people or public group>”	PeopleOrPublicGroupListRuleElementData
0x0000012F	“reply using <template>”	PathRuleElementData
0x00000130	“display <a specific message> in the New Item Alert window”	DisplayMessageInNewItemAlertWindowRuleElementData
0x00000131	"flag message for <action in a number of days>"	FlagRuleElementData
0x00000132	“clear the Message flag”	SimpleRuleElementData
0x00000133	“assign it to the <category> category”	CategoriesListRuleElementData
0x00000136	“play <sound>”	PathRuleElementData
0x00000137	“mark it as <importance>”	ImportanceRuleElementData
0x00000138	“mark it as <sensitivity>”	SensitivityRuleElementData
0x00000139	“move a copy to the <specified> folder”	MoveToFolderRuleElementData
0x0000013A	“notify me when it is read”	SimpleRuleElementData
0x0000013B	“notify me when it is delivered”	SimpleRuleElementData
0x0000013C	“Cc the message to <people or public group>”	PeopleOrPublicGroupListRuleElementData
0x0000013E	“defer delivery by <a number of> minutes”	DeferDeliveryRuleElementData
0x0000013F	“perform <a custom action>”	PeformCustomActionRuleElementData

0x00000142	“stop processing more rules”	SimpleRuleElementData
0x00000143	“redirect it to <people or public group>”	PeopleOrPublicGroupListRuleElementData
0x00000146	“have server reply using <a specific message>”	AutomaticReplyRuleElementData
0x00000147	“forward it to <people or public group> as attachment”	PeopleOrPublicGroupListRuleElementData
0x00000148	“print it”	SimpleRuleElementData
0x00000149	“start <application>” Note: this has been hidden in Outlook 2016	PathRuleElementData
0x0000014A	“permanently delete it”	SimpleRuleElementData
0x0000014B	“run <script>” Note: this has been hidden in Outlook 2016	RunScriptRuleElementData
0x0000014C	“mark as read”	SimpleRuleElementData
0x0000014F	“display a Desktop alert”	SimpleRuleElementData
0x00000151	“flag message for <follow up at this time>”	FlagForFollowUpRuleElementData
0x00000152	“clear message’s categories”	SimpleRuleElementData
0x00000153	“apply retention policy: <retention policy>”	ApplyRetentionPolicyRuleElementData

Exceptions

Value	Description	Data
0x000001F4	“except where my name is in the To box”	SimpleRuleElementData
0x000001F5	“except if sent only to me”	SimpleRuleElementData
0x000001F6	“except where my name is not in the To Box”	SimpleRuleElementData
0x000001F7	“except if from <people or public group>”	PeopleOrPublicGroupListRuleElementData
0x000001F8	“except if sent to <people or public group>”	PeopleOrPublicGroupListRuleElementData
0x000001F9	“except if the subject contains <specific words>”	StringsListRuleElementData
0x000001FA	“except if the body contains <specific words>”	StringsListRuleElementData
0x000001FB	“except if the subject or body contains <specific words>”	StringsListRuleElementData
0x000001FC	“except if it is flagged for <action>”	FlaggedForActionRuleElementData
0x000001FE	“except if it is marked as <importance>”	ImportanceRuleElementData
0x000001FF	“except if it is marked as <sensitivity>”	SensitivityRuleElementData
0x00000203	“except if it is assigned to <category> category”	CategoriesListRuleElementData
0x00000208	“except if it is an automatic reply”	SimpleRuleElementData
0x0000020A	“except if it has an attachment”	SimpleRuleElementData
0x0000020B	“except with <selected properties> of documents or forms”	WithSelectedPropertiesOfDocumentOrFormsRuleElementData

0x0000020C	“except with a size <in a specific range>	SizeInSpecificRangeRuleElementData
0x0000020D	“except if received <in a specific date span>	ReceivedInSpecificDateSpanRuleElementData
0x0000020E	“except where my name is in the Cc box”	SimpleRuleElementData
0x0000020F	“except if my name is in the To or Cc box”	SimpleRuleElementData
0x00000210	“except if it uses the <form name> form”	UsesFormRuleElementData
0x00000211	“except with <specific words> in the recipient's address”	StringsListRuleElementData
0x00000212	“except with <specific words> in the sender’s address”	StringsListRuleElementData
0x00000213	“except if the message header contains <specific words>”	StringsListRuleElementData
0x00000214	“except through the <specified> account”	ThroughAccountRuleElementData
0x00000215	“except if sender is <specified> Address Book”	SenderInSpecifiedAddressBookRuleElementData
0x00000216	“except if it is a meeting invitation or update”	SimpleRuleElementData
0x00000219	“except if it is from RSS Feeds with <specified text> in the title”	StringsListRuleElementData
0x0000021A	“except if it is assigned to any category”	SimpleRuleElementData
0x0000021B	“except from any RSS Feed”	SimpleRuleElementData

Notes

- Outlook requires the rule element 0x00000142 (“stop processing more rules”) to be present if the rule element 0x0000014A (“permanently delete it”) is selected.
- Outlook requires the rule element 0x000000EF (“on this computer only” condition) to be present for the following rule elements
    - 0x000000EE (“through the <specified> account” condition) – this cannot be unselected)
    - 0x000000F0 (“sender is in the <specified> Address Book” condition) – this cannot be unselected
    - 0x00000116 (“play <sound>” action) – this can be unselected
    - 0x00000149 (“start <application>” action) – this can be unselected
    - 0x0000014B (“run <script>” action) – this can be unselected
    - 0x0000014F (“display a Desktop alert” action) – this can be unselected
    - 0x00000214 (“except through the <specified> account” exception) – this cannot be unselected)
    - 0x00000215 (“except if sender is in the <specified> Address Book” exception) – this cannot be unselected

2.4.1. String8

Specifies an ASCII encoded string.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Length								Length Extended (optional)																Value (variable)							

Length (1 byte): An unsigned integer that specifies the number of ASCII characters in the **Value** field. If this value is 0xFF then the **Length Extended** field MUST be present and specifies the length of the **Value** field.

Length Extended (2 bytes, optional): An unsigned integer that specifies the number of ASCII characters in the **Value** field. This field MUST be present if **Length** is 0xFF.

Value (variable): An ASCII encoded string of length **Length** or **Length Extended** if present**.**

2.4.2. String

Specifies a UTF-16 little endian encoded string.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Length								Length Extended (optional)																Value (variable)						

Length (1 byte): An unsigned integer that specifies the number of UTF-16 little-endian characters in the **Value** field. If this value is 0xFF then the **Length Extended** field MUST be present and specifies the length of the **Value** field.

Length Extended (2 bytes, optional): An unsigned integer that specifies the number of UTF-16 little-endian characters in the **Value** field. This field MUST be present if **Length** is 0xFF.

Value (variable): A UTF-16 little-endian encoded string of length **Length.**

2.4.3. SearchEntry

Specifies the entry in a list of strings.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown																														
Value (variable)																														

Unknown (4 bytes): An unsigned integer with unknown meaning. Always zero. Possibly flags.

Value (variable): A **String** that specifies the entry's value.

2.4.4. PropertyValueArray

Specifies a list of values.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown																														
Number of Properties																														
Property Data Size																														
Property Header 0																														
…																														
Property Header N																														
Property Data (variable)																														

Unknown (4 bytes): An unsigned integer with unknown meaning. Always zero.

Number of Properties (4 bytes): An unsigned integer that specifies the number of properties contained in this array.

Property Data Size (4 bytes): An unsigned integer that specifies the length in bytes of data following this field.

Property Header (variable): An array of **PropertyValueHeader** values of length **Number of Properties** that specifies the property values contained in the array.

Property Data (variable): An array of bytes of length **Number of Properties – Number of Properties * 12**

2.4.5. PropertyValueHeader

Specifies a list of values.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Data Type																Id															
Data 1																															
Data 2																															
Data 3																															

Data Type (2 bytes): An unsigned integer specified in [MS-OXCDATA] section 2.11.1 that defines the type of data stored by this property.

Id (2 bytes): An unsigned integer that defines the id of this property.

Data 1 (4 bytes): An unsigned integer that defines the first 4 bytes of data of this property.

Data 2 (4 bytes): An unsigned integer that defines the second 4 bytes of data of this property.

Data 3 (4 bytes): An unsigned integer that defines the third 4 bytes of data of this property.

2.4.5.2. Fixed Length Properties

Following is a list of fixed length property types. All of these property types are specified in [MS-OXCDATA] section 2.11.1

- **PtypInteger16** *[TODO: not seen in wild, can't verify]*
- **PtypInteger32**
- **PtypFloating32** *[TODO: not seen in wild, can't verify]*
- **PtypFloating64** *[TODO: not seen in wild, can't verify]*
- **PtypBoolean** *[TODO: not seen in wild, can't verify]*
- **PtypCurrency** *[TODO: not seen in wild, can't verify]*
- **PtypFloatingTime** *[TODO: not seen in wild, can't verify]*
- **PtypTime** *[TODO: not seen in wild, can't verify]*
- **PtypInteger64** *[TODO: not seen in wild, can't verify]*
- **PtypErrorCode**

All fixed length properties are stored in the **Data2** field of the **PropertyValueHeader.**

2.4.5.3. Variable Length Properties

A variable length property, within the context of this document, is defined as one where each instance of the property can have a value of a different size. Such properties are specified along with their lengths or have alternate mechanisms (such as terminating null characters) for determining their size. Following is an exhaustive list of property types that are either variable length or stored in a stream like variable length property types

- **PtypString:** value is a null terminated Unicode little endian starting at the offset **Data2** field of the **PropertyValueHeader**
- **PtypBinary:** value is an array of bytes of length **Data3** field of the **PropertyValueHeader** starting at the offset **Data2** of the **PropertyValueHeader**
- **PtypString8** *[TODO: not seen in wild, can't verify]*
- **PtypGuid** *[TODO: not seen in wild, can't verify]*
- **PtypObject** *[TODO: not seen in wild, can't verify]*

2.4.6. Form

Specifies a form.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Unknown																															
Name (variable)																															
Class Name (variable)																															

Unknown (4 bytes): An unsigned integer with unknown meaning. Always zero.

Name (variable): A **String** that specifies the name of the form.
Note: Outlook limits the length of this field to 128 characters.

Class Name (variable): A **String8** that specifies the class name of the form. See https://docs.microsoft.com/en-us/openspecs/exchange_server_protocols/ms-oxcmsg/6bff5405-8132-4e03-b852-d5241ff173b1

Value	Description	Notes
IPM	Generic	
IPM.Activity	Journal Entry	Can create subclass
IPM.Appointment	Appointment	
IPM.Conflict	Conflict Message	
IPM.Conflict.Resolution.Message	Conflict Resolution Form	
IPM.Contact	Contact	Can create subclass
IPM.DistList	Distribution List	
IPM.Document	Document	
IPM.InfoPathForm	InfoPath Form	
IPM.Note	Message	Can create subclass
IPM.Note.Mobile.MMS	Multimedia Message	
IPM.Note.RECEIPT.SMIME	SMIME Receipt	

IPM.Note.Rules.OofTemplate.Microsoft	Automatic Replies template	
IPM.Note.Rules.ReplyTemplate.Microsoft	Rule reply template	
IPM.Note.SMIME	SMIME Encrypted form	
IPM.Note.SMIME.MultipartSigned	SMIME digitally signed form	
IPM.Note.Secure	Encrypted Message	
IPM.Note.Secure.Sign	Digitally Signed Message	
IPM.OLE.CLASS.{00061055-0000-0000-C000-000000000046}	Message class of recurring exceptions	See https://docs.microsoft.com/en-us/openspecs/exchange_server_protocols/ms-oxcical/6911f0f9-a26b-44bd-be7e-0fe38059fae0
IPM.Outlook.Recall	Recall Message Form	
IPM.POST	Post	Can create subclass
IPM.POST.RSS	RSS Article	Can create subclass
IPM.Recall	Message Recall Report	
IPM.Remote	Remote	
IPM.Resend	Resend	
IPM.Schedule.Meeting.Cancelled	Meeting Cancellation	
IPM.Schedule.Meeting.Request	Meeting Request	Can create subclass
IPM.Schedule.Meeting.Request.Neg	Decline Meeting Response	
IPM.Schedule.Meeting.Resp.Pos	Accept Meeting Response	
IPM.Schedule.Meeting.Resp.Tent	Tentative Meeting Response	
IPM.Sharing	Sharing Request	
IPM.StickyNote	Note	
IPM.Task	Task	Can create subclass
IPM.TaskRequest	Task Request	
IPM.TaskRequest.Accept	Task Accept	
IPM.TaskRequest.Decline	Task Decline	
IPM.TaskRequest.Update	Task Update	
REPORT	Report	

2.4.7. DocumentProperty

Specifies a form.

<table>
<tr><th>0</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>9</th><th>20</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>30</th><th>1</th></tr>
<tr><td colspan="31">Field (variable)</td></tr>
<tr><td colspan="16">Data Type</td><td colspan="15">Id</td></tr>
<tr><td colspan="31">String Match Type</td></tr>
<tr><td colspan="31">String Value (variable)</td></tr>
<tr><td colspan="31">Number Match Type</td></tr>
<tr><td colspan="31">Unknown1</td></tr>
<tr><td colspan="31">Number Value</td></tr>
<tr><td colspan="31">Unknown2</td></tr>
</table>

Date Match Type
Unknown3
Date Value
…
Unknown4

Field (variable): A **String** that specifies the field of the document.
Note: Outlook limits the length of this field to 32 characters.

Data Type (2 bytes): An unsigned integer specified in [MS-OXCDATA] section 2.11.1 that defines the type of data stored by this property.

Id (2 bytes): An unsigned integer that defines the id of this property.

Value	Data Type	Field
0x8222	PtypString, 0x001F	Author
0x8223	PtypInteger32, 0x0003	Bytes
0x8224	PtypString, 0x001F	Category
0x8225	PtypInteger32, 0x0003	Characters
0x8226	PtypString, 0x001F	Comments
0x8227	PtypString, 0x001F	Company
0x8228	PtypTime, 0x0040	Creation Time
0x8229	PtypString, 0x001F	Document Subject
0x822A	PtypString, 0x001F	Edit Time
0x822B	PtypInteger32, 0x0003	Hidden Slides
0x8032	PtypMultipleString, 0x101F	Keywords
0x822C	PtypString, 0x001F	Last Author
0x822D	PtypTime, 0x0040	Last Saved Time
0x822E	PtypInteger32, 0x0003	Lines
0x822F	PtypString, 0x001F	Manager
0x8230	PtypInteger32, 0x0003	Multimedia Clips
0x8231	PtypInteger32, 0x0003	Notes
0x8232	PtypInteger32, 0x0003	Pages
0x8233	PtypInteger32, 0x003	Paragraphs
0x8234	PtypString, 0x001F	Presentation Format
0x8235	PtypTime, 0x0040	Printed
0x8236	PtypString, 0x001F	Revision Number
0x8237	PtypInteger32, 0x0003	Slides
0x8238	PtypString, 0x001F	Template
0x8239	PtypString, 0x001F	Title
0x823A	PtypInteger32, 0x0003	Words

String Match Type (4 bytes): An unsigned integer that defines the match type for string fields.

Name	Value
Contains	0x00000000
Is Exactly	0x00000001
Does Not Contain	0x00000002

String Value (variable): A **String** that defines the value used when matching string fields.

Number Match Type (4 bytes): An unsigned integer that defines the match type for numerical fields.

Name	Value
Equals	0x00000000
Not Equal To	0x00000001
Is at Most	0x00000002
Is at Least	0x00000003
Is More Than	0x00000004
Is Less Than	0x00000005

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Number Value (4 bytes): An unsigned little-endian that defines the value used when matching numerical fields.
Note: Outlook limits the length of this field to 39 characters (999999999999999999999999999999999999999) but converts this to 2.147e+09.

Boolean Value (4 bytes): An unsigned little-endian that defines the value used when matching Boolean fields representing true if this value is zero, else false.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Date Match Type (4 bytes): An unsigned integer that defines the match type for date fields.

Name	Value
After	0x00000000
Before	0x00000001

Unknown3 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Date Value (8 bytes): A **timestamp** that specifies the value used when matching date fields.

Unknown4 (4 bytes): An unsigned integer with unknown meaning. Always zero.

2.4.8. UnknownRuleElement0x64Data

Contains data for rule elements with identifier 0x00000064 with unknown meaning.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Unknown 3																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Unknown3 (4 bytes): An unsigned integer with unknown meaning. Always one.

2.4.9. SimpleRuleElementData

Contains data for:

- Rule elements with identifier 0x0000000C8 specifying the "where my name is in the To box" condition.
- Rule elements with identifier 0x0000000C9 specifying the "sent only to me" condition.
- Rule elements with identifier 0x000000CA specifying the "where my name is not in the To box" condition.
- Rule elements with identifier 0x000000DE specifying the "which has attachment" condition.
- Rule elements with identifier 0x0000000E2 specifying the "where my name is in the Cc box" condition.
- Rule elements with identifier 0x0000000E3 specifying the "where my name is in the To or Cc box" condition.
- Rule elements with identifier 0x0000000F0 specifying the "which is a meeting invitation or update" condition.
- Rule elements with identifier 0x0000000F5 specifying the "from any RSS feed" condition.
- Rule elements with identifier 0x00000012D specifying the "delete it" action.
- Rule elements with identifier 0x000000132 specifying the "clear the Message flag" action.
- Rule elements with identifier 0x00000013A specifying the "notify me when it is read" action.
- Rule elements with identifier 0x00000013B specifying the "notify me when it is delivered" action.
- Rule elements with identifier 0x000000142 specifying the "stop processing more rules" action.
- Rule elements with identifier 0x00000014A specifying the "permanently delete it" action.
- Rule elements with identifier 0x00000014C specifying the "mark as read" action.
- Rule elements with identifier 0x00000014F specifying the "display a Desktop alert" action.
- Rule elements with identifier 0x000000152 specifying the "clear message's categories" action.
- Rule elements with identifier 0x0000001F4 specifying the "except where my name is in the To box" exception.
- Rule elements with identifier 0x0000001F5 specifying the "except if sent only to me" exception.
- Rule elements with identifier 0x0000001F6 specifying the "except where my name is not in the To Box" exception.
- Rule elements with identifier 0x000000208 specifying the "except if it is an automatic reply" exception.
- Rule elements with identifier 0x00000020A specifying the "except if it has an attachment" exception.
- Rule elements with identifier 0x00000020E specifying the "except where my name is in the Cc box" exception.
- Rule elements with identifier 0x00000020F specifying the "except if my name is in the To or Cc box" exception.
- Rule elements with identifier 0x000000216 specifying the "except if it is a meeting invitation or update" exception.
- Rule elements with identifier 0x00000021A specifying the "except if it is assigned to any category" exception.

- Rule elements with identifier 0x00000020F specifying the "except from any RSS Feed" exception.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Reserved																														

Reserved (4 bytes): An unsigned integer with unknown meaning. Always zero.

2.4.10. PeopleOrPublicGroupListRuleElementData

Contains data for:

- Rule elements with identifier 0x000000CB specifying the "from <people or public group>" condition.
- Rule elements with identifier 0x000000CC specifying the "sent to <people or public group>" condition.
- Rule elements with identifier 0x0000012E specifying the "forward it to <people or public group> as attachment" action.
- Rule elements with identifier 0x0000013C specifying the "Cc the message to <people or public group>" action.
- Rule elements with identifier 0x00000144 specifying the "redirect it to <people or public group>" action.
- Rule elements with identifier 0x00000147 specifying the "forward it to <people or public group> as attachment" action.
- Rule elements with identifier 0x000001F7 specifying the "except if from <people or public group>" action.
- Rule elements with identifier 0x000001F8 specifying the "except if sent to <people or public group>" action.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Number of Values																														
Value 0																														
…																														
Value N																														
Unknown3																														
Unknown4																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Number of Values (4 bytes): An unsigned integer that specifies the length of the **Values** field

Values (variable): An array of **PropertyValueArray** values of length **Number of Values** that specifies the people or public group names to use as a filter.

Unknown3 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown4 (4 bytes): An unsigned integer with unknown meaning. Always zero.

2.4.11. StringsListRuleElementData

Contains data for

- Rule elements with identifier 0x000000CD specifying the "with specific words in the subject" condition.
- Rule elements with identifier 0x000000CE specifying the "with specific words in the body" condition.
- Rule elements with identifier 0x000000CF specifying the "with specific words in the subject or body" condition.
- Rule elements with identifier 0x000000E5 specifying the "with specific words in the recipient's address" condition.
- Rule elements with identifier 0x000000E6 specifying the "with specific words in the sender's address" condition.
- Rule elements with identifier 0x000000E8 specifying the "with specific words in the message header" condition.
- Rule elements with identifier 0x000000F5 specifying the "from RSS feeds with <specified text> in the title" condition.
- Rule elements with identifier 0x000001F9 specifying the "except if the subject contains <specific words>" exception.
- Rule elements with identifier 0x000001FA specifying the "except if the body contains <specific words>" exception.
- Rule elements with identifier 0x000001FB specifying the "except if the subject or body contains <specific words>" exception.
- Rule elements with identifier 0x00000211 specifying the "except with <specific words> in the recipient's address" exception.
- Rule elements with identifier 0x00000212 specifying the "except with <specific words> in the sender's address" exception.
- Rule elements with identifier 0x00000213 specifying the "except if the message header contains <specific words>" exception.
- Rule elements with identifier 0x00000219 specifying the "except if it is from RSS Feeds with <specified text> in the title" exception.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Number of Entries																														
Entry 0																														
…																														
Entry N																														

Number of Entries (4 bytes): An unsigned integer that specifies the number of words or phrases to search for in the subject.

Entries (variable): An array of **SeachEntry** values of length **Number of Entries** that specifies the words or phrases to search for in the subject

2.4.12. ImportanceRuleElementData

Contains data for

- Rule elements with identifier 0x000000D2 specifying the "marked as <importance>" condition.
- Rule elements with identifier 0x00000137 specifying the "mark it as <importance>" action.
- Rule elements with identifier 0x000001FE specifying the "except if it is marked as <importance>" exception.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Unknown1																															
Unknown2																															
Importance																															

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Importance (4 bytes): An integer that indicates the importance of the message to condition on defined in [MS-OXCMSG] section 2.2.1.11.

2.4.13. SensitivityRuleElementData

Contains data for

- Rule elements with identifier 0x000000D3 specifying the "marked as <sensitivity>" condition.
- Rule elements with identifier 0x00000138 specifying the "mark it as <sensitivity>" action.
- Rule elements with identifier 0x000001FF specifying the "except if it is marked as <sensitivity>" exception.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Unknown1																															
Unknown2																															
Sensitivity																															

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Sensitivity (4 bytes): An integer that indicates the sensitivity of the message to condition on defined in [MS-OXCMSG] section 2.2.1.13.

2.4.14. CategoriesListRuleElementData

Contains data for

- Rule elements with identifier 0x000000D7 specifying the "assigned to <category> category" condition.
- Rule elements with identifier 0x00000133 specifying the "assign it to the <category> category" action.
- Rule elements with identifier 0x0000203 specifying the "except if it is assigned to <category> category" condition.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Categories (variable)																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Categories (variable): A **String** that specifies a list of categories delineated with a semicolon.
Note: Outlook does not allow the ";" character to be entered.

2.4.15. FlaggedForActionRuleElementData

Contains data for

- Rule elements with identifier 0x000000D0 specifying the "flagged for <action>" condition.
- Rule elements with identifier 0x000001FC specifying the "except if it is flagged for <action>" condition.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Unknown3																														
Action (variable)																														
Unknown4																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Unknown3 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Action (variable): A **String** that specifies the action.
Note: Outlook limits the length of this field to 100 characters.

Unknown4 (4 bytes): An unsigned integer with unknown meaning. Always one.

2.4.16. WithSelectedPropertiesOfDocumentOrFormsRuleElementData

Contains data for

- Rule elements with identifier 0x000000DF specifying the "with <selected properties> of documents or properties" condition.
- Rule elements with identifier 0x0000020B specifying the "except with <selected properties> of documents or forms" exception.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														

Unknown2
Forms (variable)
Number of Document Properties
Document Property 0
…
Document Property N
Number of Classes
Class 0
…
Class N

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Forms (variable): A **String** that specifies the list of forms separated by a semicolon (";").

Number of Document Properties (4 bytes): An unsigned integer that specifies the number of document properties in this condition.

Document Properties (variable): An array of **DocumentProperty** values of length **Number of Document Properties** that specifies the forms in this condition.

Number of Classes (4 bytes): An unsigned integer that specifies the number of classes in this condition.

Classes (variable): An array of **String** values of length **Number of Document Properties** that specifies the forms in this condition.

2.4.17. SizeInSpecificRangeRuleElementData

Contains data for

- Rule elements with identifier 0x000000E0 specifying the "with a size <in a specific range>" condition.
- Rule elements with identifier 0x0000020C specifying the "except with a size <in a specific range> exception.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Unknown1																															
Unknown2																															
Min Size in Kilobytes																															
Max Size in Kilobytes																															

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Min Size in Kilobytes (4 bytes): An unsigned integer that specifies the minimum message size in kilobytes.

Max Size in Kilobytes (4 bytes): An unsigned integer that specifies the maximum message size in kilobytes.

2.4.18. ReceivedInSpecificDateSpanRuleElementData

Contains data for

- Rule elements with identifier 0x000000E1 specifying the "received <in a specific date span>" condition.
- Rule elements with identifier 0x0000020D specifying the "except if received <in a specific date span> exception.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Include After Date																														
Unknown3																														
After Date																														
…																														
Include Before Date																														
Unknown4																														
Before Date																														
…																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Include After Date (4 bytes): A Boolean value that specifies whether to include the after date in the condition. This value MUST be one of the following:

Value	Meaning
FALSE 0x00000000	Do not include the after date in the condition
TRUE 0x00000001	Include the after date in the condition

Unknown3 (4 bytes): An unsigned integer with unknown meaning. Always zero.

After Date (8 bytes): A **timestamp** that specifies whether the after date of the condition.

Include Before Date (4 bytes): A Boolean value that specifies whether to include the before date in the condition.

Value	Meaning
FALSE 0x00000000	Do not include the before date in the condition
TRUE 0x00000001	Include the before date in the condition

Unknown4 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Before Date (8 bytes): A **timestamp** that specifies whether the before date of the condition.

2.4.19. UsesFormRuleElementData

Contains data for

- Rule elements with identifier 0x000000E4 specifying the "uses the <form name> form" condition.
- Rule elements with identifier 0x00000210 specifying the "except if it uses the <form name> form" exception.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Number of Forms																														
Form 0																														
…																														
Form N																														

Number of Forms (4 bytes): An unsigned integer that specifies the number of forms in this condition.

Forms (variable): An array of **Form** values of length **Number of Forms** that specifies the forms in this condition.

2.4.20. ThroughAccountRuleElementData

Contains data for

- Rule elements with identifier 0x000000EE specifying the "through the specified account" condition.
- Rule elements with identifier 0x00000214 specifying the "except through the <specified> account" exception.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Account Name (variable)																														
Unknown3 (variable)																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Account Name (variable): A **String** that specifies the account name.
Note: Outlook limits the length of this field to 63 characters.

Unknown3 (variable): A **String8** with unknown meaning. Observed as a 10-digit number (-190692068) represented as an ASCII string.

2.4.21. OnThisComputerOnlyRuleElementData

Contains data for rule elements with identifier 0x0000000EF specifying the "on this computer only" condition

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
UUID																														
…																														
…																														
…																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

UUID (16 bytes): A **GUID** with unknown meaning.

2.4.22. SenderInSpecifiedAddressBookRuleElementData

Contains data for

- Rule elements with identifier 0x000000F0 specifying the "sender is in the <specified> Address Book" condition.
- Rule elements with identifier 0x00000215 specifying the "except if sender is <specified> Address Book" exception.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Entry Id Size																														
Entry Id (variable)																														
Account Name (variable)																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Entry Id Size (4 bytes): An unsigned integer that specifies the number of bytes in the **Entry Id** field.

Entry Id (variable): A **ContactAddressEntryID** ([MS-OXCDATA] section 2.2.5.3) that specifies the entry ID of the Address Book. This field is filled with the number of bytes specified by the **Entry Id Size** field.

Account Name (variable): A **String** that specifies the name of the Address Book.

2.4.23. MoveToFolderRuleElementData

Contains data for

- Rule elements with identifier 0x0000012C specifying the “move it to the <specified> folder” action.
- Rule elements with identifier 0x00000139 specifying the “move a copy to the <specified> folder” action.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Folder Entry Id Size																														
Folder Entry Id (variable)																														
Store Entry Id Size																														
Store Id (variable)																														
Folder Name (variable)																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Folder Entry Id Size (4 bytes): An unsigned integer that specifies the size of the **Folder Entry Id** field.

Folder Entry Id (variable): A **FolderEntryId** ([MS-OXCDATA] section 2.2.4.1) that specifies the entry ID of the destination folder. This field is filled with the number of bytes specified by the **Folder Entry Id Size** field.

Store Entry Id Size (4 bytes): An unsigned integer that specifies the size of the **Store Entry Id** field.

Store Entry Id (variable): The entry ID of the mailbox that contains the destination folder. This field is filled with the number of bytes specified by the **Store Entry Id Size** field.

FolderName (variable): A **String** that specifies the name of the destination folder.

2.4.24. PathRuleElementData

Contains data for

- Rule elements with identifier 0x0000012F specifying the “reply using <template>” action.
- Rule elements with identifier 0x00000136 specifying the “play <sound>” action.
- Rule elements with identifier 0x00000149specifying the “start <application>” action.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Path (variable)																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Path (variable): A **String** that specifies the path.
Note: Outlook limits the length of this field to 260 characters and rejects lengths over 255 characters. Outlook does not appear to validate the path.

2.4.25. DisplayMessageInNewItemAlertWindowRuleElementData

Contains data for rule elements with identifier 0x00000130 specifying the "display <a specific message> in the New Item Alert window" action.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Message (variable)																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Message (variable): A **String** that specifies the message to display.

2.4.26. FlagRuleElementData

Contains data for rule elements with identifier 0x00000131 specifying the "flag message for <action in a number of days>" action.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Days																														
Action Name (variable)																														
Unknown3																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Days (4 bytes): An unsigned integer that specifies the number of days to flag the action.
Note: Outlook limits this value of this field to between 0 and 365.

Action Name (variable): A **String** that specifies the name of the action.
Note: Outlook limits the length of this field to 100 characters.

Unknown3 (4 bytes): An unsigned integer with unknown meaning. Always zero.

2.4.27. DeferDeliveryRuleElementData

Contains data for rule elements with identifier 0x0000013E specifying the "defer delivery by <a number of> minutes" action.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1

Unknown1
Unknown2
Minutes

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Minutes (4 bytes): An unsigned integer that specifies the number of minutes for which you want the messages to be held before it is sent.
Note: Outlook limits the maximum value of this field to 120 minutes (2 hours).

2.4.28. PeformCustomActionRuleElementData

Contains data for rule elements with identifier 0x0000013F specifying the "perform <a custom action>" action.
Note: this has been removed in Outlook 2010.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Location (variable)																														
Name (variable)																														
Options (variable)																														
Action Value (variable)																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Location (variable): A **String** that specifies the location of the DLL that contains the action. The format is "4.0;<Location>[;1]" where "<Location>" represents the file path of the DLL and "[;1]" is appended if no options/values are set

- E.g. "4.0;C:\\Program Files (x86)\\TechHit.com\\AutoRead\\autoread.dll;1"
- E.g. "4.0;C:\\Program Files (x86)\\TechHit.com\\AutoRead\\autoread.dll"

Name (variable): A **String** that specifies the name of the custom action.

- E.g. "AutoRead"

Options (variable): A **String** that specifies the options of the custom action. The format is a repeating series of "<key>: <value" strings separated and terminated by the pipe character ("|")

- E.g. "v: 1|c: autoread|b: 4|"

Action Value (variable): A **String** that specifies the action value of the custom action.

- E.g. "AutoRead"

2.4.29. AutomaticReplyRuleElementData

Contains data for rule elements with identifier 0x00000146 specifying the "have server reply using <a specific message>" action.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Message Entry Id Size																														
Message Entry Id (variable)																														
Function (variable)																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Message Entry Id Size (4 bytes): An unsigned integer that specifies the size of the **Message Entry Id** field.

Message Entry Id (variable): A **MessageEntryId** ([MS-OXCDATA] section 2.2.4.2) that specifies the entry ID of the message to send. This field is filled with the number of bytes specified by the **Message Entry Id Size** field.

Name (variable): A **String** that specifies the name of the message.

2.4.30. RunScriptRuleElementData

Contains data for rule elements with identifier 0x0000014B specifying the "run <script>" action.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Name (variable)																														
Function (variable)																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Name (variable): A **String** that specifies the name of the function.

Function (variable): A **String** that specifies the name of the function.

2.4.31. FlagForFollowUpRuleElementData

Contains data for rule elements with identifier 0x00000151 specifying the "flag message for <follow up at this time>" action.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Follow Up																														
Action Name (variable)																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Follow Up (4 bytes): An unsigned integer that specifies when to follow up.

Value	Name
0x00000001	Today
0x00000002	Tomorrow
0x00000003	This Week
0x00000004	Next Week
0x00000002	No Date
0x00000002	Complete

Action Name (variable): A **String** that specifies the name of the action.
Note: Outlook limits the length of this field to 100 characters.

2.4.32. ApplyRetentionPolicyRuleElementData

Contains data for rule elements with identifier 0x00000153 specifying the "apply retention policy: <retention policy>" action.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Follow Up																														
Guid																														
…																														
…																														
…																														
Name (variable)																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Guid (16 bytes): A **GUID** that specifies the identifier of the retention policy.

Name (variable): A **String** that specifies the name of the retention policy.

2.4.33. ApplyRuleElementData

Contains data for rule elements with identifier 0x00000190 specifying the type of messages to which this rule applies.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Unknown1																														
Unknown2																														
Flags																														

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Always one.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.

Flags (4 bytes): An unsigned integer that specifies the target that applies.

Name	Value
ApplyAfterReceived	0x01
ApplyAfterSent	0x04

2.5. RulesFooter

The footer information for a list of rules.

0	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	9	20	1	2	3	4	5	6	7	8	9	30	1
Template Directory Length																														
Template Directory (variable)																														
Unknown1																														
Creation Date																														
…																														
Unknown2																														

Template Directory Length (4 byte): An unsigned integer that specifies the number of characters in the **Template Directory** field.

Template Directory (variable): A UTF-16 little-endian encoding string that specifies the most recently used location from which a template file was used. This string is not null-terminated. Note: this field is ASCII in Outlook 2000 and earlier versions.

Unknown1 (4 bytes): An unsigned integer with unknown meaning. Observed the values 2 and 0.

Creation Date (8 bytes): A **timestamp** that specifies the date and time that the rules were created. Have observed the value 0xC0FAA95000000000 and 0x0000000000000000 (1/1/1601 12:00:00 AM) to indicate rules that have been created and not yet saved.

Unknown2 (4 bytes): An unsigned integer with unknown meaning. Always zero.