

# Outlook Rules (.RWZ) File Format

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# 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”](#).

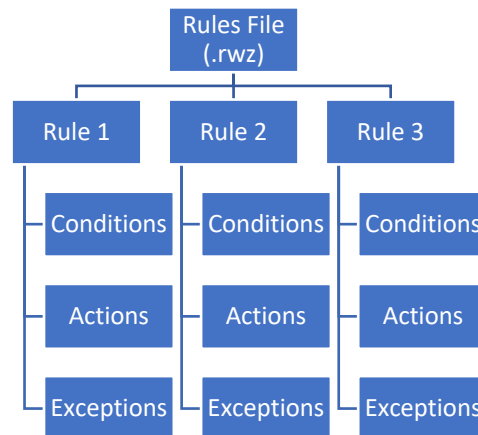
[RFC2119] Bradner, S., “Key words for use in RFCs to Indicate Requirement Levels”, BCP 14, RFC 2119, March 1997, <http://www.rfc-editor.org/rfc/rfc2119.txt>

[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 stores 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

### 2.1. Top-level Structure

The top-level structure is as follows:

|                   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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 |
| Header (variable) |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Rule 0            |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| ...               |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Rule N            |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Footer (variable) |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

**Header (50 bytes):** A [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):** A [RulesFooter](#) containing information that defines the characteristics of the rules file, including timestamp information.

### 2.2. Objects

#### 2.2.1. String8 Object

Specifies an ASCII encoded string.

|        |   |   |   |   |   |   |   |   |   |                            |    |    |    |    |    |    |    |    |    |    |    |                  |    |    |    |    |    |    |    |    |    |
|--------|---|---|---|---|---|---|---|---|---|----------------------------|----|----|----|----|----|----|----|----|----|----|----|------------------|----|----|----|----|----|----|----|----|----|
| 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 |
| 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.

#### 2.2.2. String Object

Specifies a UTF-16 little endian encoded string.

|        |   |   |   |   |   |   |   |   |   |                            |    |    |    |    |    |    |    |    |    |    |    |                  |    |    |    |    |    |    |    |    |    |
|--------|---|---|---|---|---|---|---|---|---|----------------------------|----|----|----|----|----|----|----|----|----|----|----|------------------|----|----|----|----|----|----|----|----|----|
| 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 |
| 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**.

### 2.2.3. SearchEntry Object

Specifies the entry in a list of strings.

|                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| 0                | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |  |
| Flags            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Value (variable) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

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

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

Note: this field is a [String8](#) (ASCII) Outlook 2000 and earlier versions.

#### 2.2.4. PropertyValueArray Object

Specifies a list of values.

|                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| 0                        | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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**

### 2.2.5. PropertyValueHeader Object

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.

2.2.5.1. 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**.

2.2.5.2. 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 UTF-16 little endian encoded string 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:** value is a null terminated ASCII encoded string starting at the offset **Data2** field of the **PropertyValueHeader**
- **PtypGuid** *[TODO: not seen in wild, can't verify]*
- **PtypObject** *[TODO: not seen in wild, can't verify]*

2.2.6. Form Object

Specifies a form.

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|









**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.

#### 2.2.8. 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 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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 or 0x05124F80                             |
| Outlook 2003 (11.0) | 68419584  | 0x04140000   |
| Outlook 2002 (10.0) | 51642368  | 0x03140000 or 0x06140000 or 0x03124F80 or 0x05124F80 |

**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.

#### 2.2.9. RulesFooter

The footer information for a list of rules.

|                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0                             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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 encoded 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.

#### 2.2.10. 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 | 0 | 1 | 2 | 3 | 4 | 5 | 6                            | 7 | 9 | 0 | 1 | 2 | 3 | 4                   | 5 | 6 | 7 | 8 | 9 | 0 | 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. MUST be “CRuleElement”.

2.3. Rules

An individual rule contained within the .rwz file.

|                   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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 |
| Header (variable) |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Rule Element 0    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| ...               |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Rule Element N    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

**Header (variable):** A [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 (0x000000190), 0x000000064, conditions, triggers, exceptions.

2.3.1. 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 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 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                               | <a href="#">UnknownRuleElement0x64Data</a> |
| 0x00000190 | “type of messages to which this rule applies” | <a href="#">ApplyRuleElementData</a>       |

#### Conditions

| Value      | Description   | Data   |
|------------|---|--|
| 0x000000C8 | “where my name is in the To box”                    | <a href="#">SimpleRuleElementData</a>                                  |
| 0x000000C9 | “sent only to me”                                   | <a href="#">SimpleRuleElementData</a>                                  |
| 0x000000CA | “where my name is not in the To box”                | <a href="#">SimpleRuleElementData</a>                                  |
| 0x000000CB | “from <people or public group>”                     | <a href="#">PeopleOrPublicGroupListRuleElementData</a>                 |
| 0x000000CC | “sent to <people or public group>”                  | <a href="#">PeopleOrPublicGroupListRuleElementData</a>                 |
| 0x000000CD | “with <specific words> in the subject”              | <a href="#">StringsListRuleElementData</a>                             |
| 0x000000CE | “with <specific words> in the body”                 | <a href="#">StringsListRuleElementData</a>                             |
| 0x000000CF | “with <specific words> in the subject or body”      | <a href="#">StringsListRuleElementData</a>                             |
| 0x000000D0 | “flagged for <action>”                              | <a href="#">FlaggedForActionRuleElementData</a>                        |
| 0x000000D2 | “marked as <importance>”                            | <a href="#">ImportanceRuleElementData</a>                              |
| 0x000000D3 | “marked as <sensitivity>”                           | <a href="#">SensitivityRuleElementData</a>                             |
| 0x000000D7 | “assigned to <category> category”                   | <a href="#">CategoriesListRuleElementData</a>                          |
| 0x000000DC | “which is an automatic reply”                       | <a href="#">SimpleRuleElementData</a>                                  |
| 0x000000DE | “which has attachment”                              | <a href="#">SimpleRuleElementData</a>                                  |
| 0x000000DF | “with <selected properties> of documents or forms”  | <a href="#">WithSelectedPropertiesOfDocumentOrFormsRuleElementData</a> |
| 0x000000E0 | “with a size <in a specific range>”                 | <a href="#">SizeInSpecificRangeRuleElementData</a>                     |
| 0x000000E1 | “received <in a specific date span>”                | <a href="#">ReceivedInSpecificDateSpanRuleElementData</a>              |
| 0x000000E2 | “where my name is in the Cc box”                    | <a href="#">SimpleRuleElementData</a>                                  |
| 0x000000E3 | “where my name is in the To or Cc box”              | <a href="#">SimpleRuleElementData</a>                                  |
| 0x000000E4 | “uses the <form name> form”                         | <a href="#">UsesFormRuleElementData</a>                                |
| 0x000000E5 | “with <specific words> in the recipient’s address”  | <a href="#">StringsListRuleElementData</a>                             |
| 0x000000E6 | “with <specific words> in the sender’s address”     | <a href="#">StringsListRuleElementData</a>                             |
| 0x000000E8 | “with <specific words> in the message header”       | <a href="#">StringsListRuleElementData</a>                             |
| 0x000000EE | “through the <specified> account”                   | <a href="#">ThroughAccountRuleElementData</a>                          |
| 0x000000EF | “on this computer only”                             | <a href="#">OnThisComputerOnlyRuleElementData</a>                      |
| 0x000000F0 | “sender is in <specified> Address Book”             | <a href="#">SenderInSpecifiedAddressBookRuleElementData</a>            |
| 0x000000F1 | “which is a meeting invitation or update”           | <a href="#">SimpleRuleElementData</a>                                  |
| 0x000000F5 | “from RSS feeds with <specified text> in the title” | <a href="#">StringsListRuleElementData</a>                             |



|            |                            |                                       |
|------------|----------------------------|---------------------------------------|
| 0x000000F6 | “assigned to any category” | <a href="#">SimpleRuleElementData</a> |
| 0x000000F7 | “from any RSS feed”        | <a href="#">SimpleRuleElementData</a> |

#### Actions

| Value      | Description   | Data  |
|------------|---|---|
| 0x0000012C | “move it to the <specified> folder”                                 | <a href="#">MoveToFolderRuleElementData</a>                       |
| 0x0000012D | “delete it”   | <a href="#">SimpleRuleElementData</a>                             |
| 0x0000012E | “forward it to <people or public group>”                            | <a href="#">PeopleOrPublicGroupListRuleElementData</a>            |
| 0x0000012F | “reply using <template>”  | <a href="#">PathRuleElementData</a>                               |
| 0x00000130 | “display <a specific message> in the New Item Alert window”         | <a href="#">DisplayMessageInNewItemAlertWindowRuleElementData</a> |
| 0x00000131 | "flag message for <action in a number of days>"                     | <a href="#">FlagRuleElementData</a>                               |
| 0x00000132 | “clear the Message flag”  | <a href="#">SimpleRuleElementData</a>                             |
| 0x00000133 | “assign it to the <category> category”                              | <a href="#">CategoriesListRuleElementData</a>                     |
| 0x00000136 | “play <sound>”  | <a href="#">PathRuleElementData</a>                               |
| 0x00000137 | “mark it as <importance>”   | <a href="#">ImportanceRuleElementData</a>                         |
| 0x00000138 | “mark it as <sensitivity>”  | <a href="#">SensitivityRuleElementData</a>                        |
| 0x00000139 | “move a copy to the <specified> folder”                             | <a href="#">MoveToFolderRuleElementData</a>                       |
| 0x0000013A | “notify me when it is read”   | <a href="#">SimpleRuleElementData</a>                             |
| 0x0000013B | “notify me when it is delivered”                                    | <a href="#">SimpleRuleElementData</a>                             |
| 0x0000013C | “Cc the message to <people or public group>”                        | <a href="#">PeopleOrPublicGroupListRuleElementData</a>            |
| 0x0000013E | “defer delivery by <a number of> minutes”                           | <a href="#">DeferDeliveryRuleElementData</a>                      |
| 0x0000013F | “perform <a custom action>”   | <a href="#">PerformCustomActionRuleElementData</a>                |
| 0x00000142 | “stop processing more rules”  | <a href="#">SimpleRuleElementData</a>                             |
| 0x00000143 | “redirect it to <people or public group>”                           | <a href="#">PeopleOrPublicGroupListRuleElementData</a>            |
| 0x00000146 | “have server reply using <a specific message>”                      | <a href="#">AutomaticReplyRuleElementData</a>                     |
| 0x00000147 | “forward it to <people or public group> as attachment”              | <a href="#">PeopleOrPublicGroupListRuleElementData</a>            |
| 0x00000148 | “print it”  | <a href="#">SimpleRuleElementData</a>                             |
| 0x00000149 | “start <application>”<br>Note: this has been hidden in Outlook 2016 | <a href="#">PathRuleElementData</a>                               |
| 0x0000014A | “permanently delete it”   | <a href="#">SimpleRuleElementData</a>                             |
| 0x0000014B | “run <script>”<br>Note: this has been hidden in Outlook 2016        | <a href="#">RunScriptRuleElementData</a>                          |
| 0x0000014C | “mark as read”  | <a href="#">SimpleRuleElementData</a>                             |
| 0x0000014F | “display a Desktop alert”   | <a href="#">SimpleRuleElementData</a>                             |
| 0x00000151 | “flag message for <follow up at this time>”                         | <a href="#">FlagForFollowUpRuleElementData</a>                    |
| 0x00000152 | “clear message’s categories”  | <a href="#">SimpleRuleElementData</a>                             |



|            |  |   |
|------------|--|---|
| 0x00000153 | “apply retention policy: <retention policy>” | <a href="#">ApplyRetentionPolicyRuleElementData</a> |
|------------|--|---|

#### Exceptions

| Value      | Description   | Data   |
|------------|---|--|
| 0x000001F4 | “except where my name is in the To box”                   | <a href="#">SimpleRuleElementData</a>                                  |
| 0x000001F5 | “except if sent only to me”                               | <a href="#">SimpleRuleElementData</a>                                  |
| 0x000001F6 | “except where my name is not in the To Box”               | <a href="#">SimpleRuleElementData</a>                                  |
| 0x000001F7 | “except if from <people or public group>”                 | <a href="#">PeopleOrPublicGroupListRuleElementData</a>                 |
| 0x000001F8 | “except if sent to <people or public group>”              | <a href="#">PeopleOrPublicGroupListRuleElementData</a>                 |
| 0x000001F9 | “except if the subject contains <specific words>”         | <a href="#">StringsListRuleElementData</a>                             |
| 0x000001FA | “except if the body contains <specific words>”            | <a href="#">StringsListRuleElementData</a>                             |
| 0x000001FB | “except if the subject or body contains <specific words>” | <a href="#">StringsListRuleElementData</a>                             |
| 0x000001FC | “except if it is flagged for <action>”                    | <a href="#">FlaggedForActionRuleElementData</a>                        |
| 0x000001FE | “except if it is marked as <importance>”                  | <a href="#">ImportanceRuleElementData</a>                              |
| 0x000001FF | “except if it is marked as <sensitivity>”                 | <a href="#">SensitivityRuleElementData</a>                             |
| 0x00000203 | “except if it is assigned to <category> category”         | <a href="#">CategoriesListRuleElementData</a>                          |
| 0x00000208 | “except if it is an automatic reply”                      | <a href="#">SimpleRuleElementData</a>                                  |
| 0x0000020A | “except if it has an attachment”                          | <a href="#">SimpleRuleElementData</a>                                  |
| 0x0000020B | “except with <selected properties> of documents or forms” | <a href="#">WithSelectedPropertiesOfDocumentOrFormsRuleElementData</a> |
| 0x0000020C | “except with a size <in a specific range>”                | <a href="#">SizeInSpecificRangeRuleElementData</a>                     |
| 0x0000020D | “except if received <in a specific date span>”            | <a href="#">ReceivedInSpecificDateSpanRuleElementData</a>              |
| 0x0000020E | “except where my name is in the Cc box”                   | <a href="#">SimpleRuleElementData</a>                                  |
| 0x0000020F | “except if my name is in the To or Cc box”                | <a href="#">SimpleRuleElementData</a>                                  |
| 0x00000210 | “except if it uses the <form name> form”                  | <a href="#">UsesFormRuleElementData</a>                                |
| 0x00000211 | “except with <specific words> in the recipient's address” | <a href="#">StringsListRuleElementData</a>                             |
| 0x00000212 | “except with <specific words> in the sender's address”    | <a href="#">StringsListRuleElementData</a>                             |
| 0x00000213 | “except if the message header contains <specific words>”  | <a href="#">StringsListRuleElementData</a>                             |
| 0x00000214 | “except through the <specified> account”                  | <a href="#">ThroughAccountRuleElementData</a>                          |
| 0x00000215 | “except if sender is <specified> Address Book”            | <a href="#">SenderInSpecifiedAddressBookRuleElementData</a>            |
| 0x00000216 | “except if it is a meeting invitation or update”          | <a href="#">SimpleRuleElementData</a>                                  |

|            |   |  |
|------------|---|--|
| 0x00000219 | “except if it is from RSS Feeds with <specified text> in the title” | <a href="#">StringsListRuleElementData</a> |
| 0x0000021A | “except if it is assigned to any category”                          | <a href="#">SimpleRuleElementData</a>      |
| 0x0000021B | “except from any RSS Feed”  | <a href="#">SimpleRuleElementData</a>      |

## 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. Rule Elements

### 2.4.1. UnknownRuleElement0x64Data

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

|           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0         | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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.

### 2.4.2. SimpleRuleElementData

Contains data for:

- Rule elements with identifier 0x000000C8 specifying the “where my name is in the To box” condition.
- Rule elements with identifier 0x000000C9 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 0x000000E2 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 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| Reserved |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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

#### 2.4.3. 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 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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.

#### 2.4.4. [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.



|            |
|------------|
| 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.

#### 2.4.6. 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 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |
| 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.

#### 2.4.7. CategoriesListRuleElementData

Contains data for

- Rule elements with identifier 0x000000D7 specifying the “assigned to <category>” condition.
- Rule elements with identifier 0x00000133 specifying the “assign it to the <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 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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.

Note: Outlook does not allow the “;” character to be entered.

#### 2.4.8. FlaggedForActionRuleElementData

- 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.

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

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

Note: Outlook limits the length of this field to 100 characters.

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

Contains data for

- Rule elements with identifier 0x000000DF specifying the “with <selected properties> of documents or properties” condition.
- Rule elements with identifier 0x00000020B specifying the “except with <selected properties> of documents or forms” 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                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 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 (“;”).  
 Note: this field is a [String8](#) (ASCII) Outlook 2000 and earlier versions.

**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.

#### 2.4.10. 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 | 0 | 1 | 2 | 3 | 4 | 5 | 6                     | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |
| 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.

#### 2.4.11. 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 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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<br>0x00000000 | Do not include the after date in the condition |
| TRUE<br>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<br>0x00000000 | Do not include the before date in the condition |
| TRUE<br>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.

2.4.12. UsesFormRuleElementData  
Contains data for

- |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| 0               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |  |
| Number of Forms |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Form 0          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| ...             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Form N          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

Note: this MUST be one in Outlook 98.

### 2.4.13. ThroughAccountRuleElementData

- 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)     |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |    |   |  |

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

Note: Outlook limits the length of this field to 63 characters.

#### 2.4.14. OnThisComputerOnlyRuleElementData

|          |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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                   |
| 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. This field SHOULD be 0x0000002E.

**Folder Entry Id (variable):** A entry ID that specifies the entry ID of the destination folder. The size of this field is specified by the **Folder Entry Id Size** field. This field SHOULD be **FolderEntryId** ([[MS-OXCDATA](#)] section 2.2.4.1).

**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. The size of this field is specified by the **Store Entry Id Size** field.

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

#### 2.4.17. 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 0x00000149 specifying the “start <application>” action.

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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.

Note: this field is a [String8](#) (ASCII) Outlook 2000 and earlier versions.

#### 2.4.18. 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 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 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.

Note: this field is a [String8](#) (ASCII) Outlook 2000 and earlier versions.

#### 2.4.19. 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 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 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.

#### 2.4.20. 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 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 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).

#### 2.4.21. PerformCustomActionRuleElementData

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 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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”

Note: this field is a [String8](#) (ASCII) Outlook 2000 and earlier versions.

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

- E.g. “AutoRead”

Note: this field is a [String8](#) (ASCII) Outlook 2000 and earlier versions.

**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|”

Note: this field is a [String8](#) (ASCII) Outlook 2000 and earlier versions.

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

- E.g. “AutoRead”

Note: this field is a [String8](#) (ASCII) Outlook 2000 and earlier versions.

#### 2.4.22. 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 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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. The size of this field is specified by the **Message Entry Id Size** field.

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

#### 2.4.23. RunScriptRuleElementData

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

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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.

#### 2.4.24. 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 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 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.

#### 2.4.25. 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 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 0 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 3 | 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.

#### 2.4.26. 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 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 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  |