ACAP Email Account Dataset Class

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   A version of this draft document is intended for submission to the
   RFC editor as a Proposed Standard for the Internet Community.
   Discussion and suggestions for improvement are requested.

   Public comments can be sent to the IETF ACAP mailing list,
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   containing SUBSCRIBE to <ietf-acap-request+@andrew.cmu.edu>.
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Table of Contents

1. **Abstract**

    It has become common for Internet mail users to have more than one
    account where mail is received, to access multiple accounts from the
    same machine, to access the same accounts from different machines,
    and to use multiple programs which require account configuration
    information.

    The Application Configuration Access Protocol [ACAP] provides an
    ideal mechanism for storage of email account data.

    This specification defines a standard ACAP dataset class for email
    accounts, and a common option for indicating a default email.

2. **Conventions Used in this Document**

    The key words "MUST", "MUST NOT", "SHOULD", "SHOULD NOT", and "MAY"
    in this document are to be interpreted as defined in "Key words for
    use in RFCs to Indicate Requirement Levels" [KEYWORDS].

3. **ACAP Standard Options**

    This specification defines the Message User Agent (MUA) Default
    Account standard option. This is a scaler option in the ACAP
    Standard Option ("/option") dataset. The entry name is
    "mua.default.account". The "option.value" attribute contains the
    value, which is a URL. Generally, this will be an ACAP URL pointing

to an entry in an Email Account dataset.

The standard option dataset class is specified in [ACAP-OPTIONS].
ACAP URLs are defined in [ACAP].

4. ACAP Email Account Dataset Class

The ACAP Email Account dataset class defines a set of attributes
which specify an email account; that is, configuration information
used for access to email on a POP or IMAP server.

4.1. ACAP Email Account Dataset Class Prefix

Datasets whose names begin with "/email" are assumed to contain
email account entries as defined in this specification.

4.2. ACAP Email Account Dataset Hierarchy

Each user may have a set of named email accounts. The default is
pointed at by the "mua.default.account" standard option. (See
section 3 for more information.)

Inheritance is likely to be useful both for inheriting site or group
defaults (for example, POP or IMAP servers, and initial client
configuration in general) as well as for inheriting user-specific
configuration when using different machines.

5. ACAP Email Account Dataset Attributes

An email account entry MUST have an "entry" attribute. All other
attributes are OPTIONAL.

Attributes are specified using Augmented Backus-Naur Form [ABNF].
All attributes are single-valued and textual unless otherwise
stated.

The ABNF defines the content of the attribute values prior to their
encoding as an ACAP string. Clients MUST conform to the syntax when
generating these attributes, but MUST NOT assume that the attribute
values will conform to this syntax on access. Servers MUST NOT
enforce the syntax.

5.1. Basic Attributes

These attributes are defined in ACAP [ACAP] and have meaning in all
dataset classes. The section describes how they are used in an
email account dataset.

entry
    The "entry" attribute is used to hold a unique name for the
    email. This name is used for inheritance, so when customizing
    an account which has an entry in an inherited dataset, the entry
    name needs to remain the same. The name should also be

    descriptive.

subdataset
    The "subdataset" attribute indicates there is another email
    account dataset underneath this entry.

5.2. Specific Attributes

   These attributes are specific to the Email Account dataset class.

   email.check-interval
       This specifies the interval, in seconds, between checks (polls)
       for new mail.

       email-check-int   = 1*DIGIT

   email.connection-type
       This contains a token indicating the type of connection used for
       this email. Clients might use this information to modify their
       use of bandwidth.

       email-conn   = "direct" / "cable-modem" / "phone-modem" /
                              "mobile-phone"

   email.leave-on-server.flag
       This specifies if the client should delay deleting mail from the
       server after downloading. This is generally useful only with
       [POP3] servers which support this.

       email-lmos-flag   = "0" / "1"

   email.leave-on-server.days
       When email.leave-on-server.flag is set (value is "1"), this
       attribute specifies the number of days messages should remain on
       the server before being deleted by the client. This is
       generally useful only with [POP3] servers which support leaving
       mail on the server.

```
         email-lmos-days     = 1*DIGIT


    email.maximum.download-size
        This contains the maximum size (in octets) of messages to be
        downloaded.  This is most useful when accessing messages via
        [POP3].

         email-max-dsize     = 1*DIGIT

    email.personality
        This specifies the default personality to assign to messages
        received via this email account.  It is generally an ACAP URL to
        an entry in an Email Personality dataset.  The ACAP Email
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        Personality dataset class is specified in [ACAP-PERSONALITY].
        ACAP-URLs are defined in [ACAP].

         email-personality   = url ;defined in [URL-BASIC]

    email.server.IMAP
        The indicates the default IMAP server to use with this email
        account.  It is generally an IMAP URL, as specified in
        [URL-IMAP].

         email-imap          = url ;defined in [URL-BASIC]

    email.server.POP
        This specifies the POP server associated with this email
        account.  It is generally a POP URL, as defined in [URL-POP].

         email-pop           = url ;defined in [URL-BASIC]

    email.sieve.script
        This specifies the text of a Sieve script which will be applied
        by the delivery agent (if supported) to mail arriving at this
        email.  Sieve is specified in [SIEVE].

         email-sieve         = 1*UTF8-CHAR

    email.sieve.syntax.errors
        If supported by the Sieve implementation, this attribute
        contains the count of syntax errors detected in the most
        recently stored Sieve script.  Sieve is specified in [SIEVE].

         email-sieve-synerr  = 1*DIGIT

    email.sieve.syntax.warnings
```

If supported by the Sieve implementation, this attribute
        contains the count of syntax warnings detected in the most
        recently stored Sieve script. Sieve is specified in [SIEVE].

        email-sieve-synwarn = 1*DIGIT

    email.sieve.syntax.errtxt
        If supported by the Sieve implementation, this attribute
        contains the text of syntax errors detected in the most recently
        stored Sieve script. The error text is formated into
        CRLF-separated lines, one line per error. Each line contains
        named attributes of the error, in a MIME-header-like format.
        The currently specified attributes are: line, offset, length,
        and text. Text MUST always be the last attribute. Sieve is
        specified in [SIEVE].

        The format is intended to be easy for a Sieve execution agent to
        generate, and easy for a Sieve user agent to parse. The Sieve
        user agent could use the information to highlight the indicated

        section of the Sieve script text, as specified by the line,
        offset, and length.

        email-sieve-errtxt = *(non-text-sieve-att ";" SP) text-sieve-att
        non-text-sieve-att = sieve-att-line / sieve-att-off /
                              sieve-att-len / sieve-att-ext
        text-sieve-att   = "text" ":" 1*UTF8-CHAR
        sieve-att-line   = "line" ":" 1*DIGIT
        sieve-att-off   = "offset" ":" 1*DIGIT
        sieve-att-len   = "length" ":" 1*DIGIT
        sieve-att-ext   = 1*UTF8-CHAR ":" 1*UTF8-CHAR
                              ; MUST not use ":" or ";"

    email.sieve.syntax.warntxt
        If supported by the Sieve implementation, this attribute
        contains the text of syntax warnings detected in the most
        recently stored Sieve script. The warning text is formated into
        CRLF-separated lines, one line per warning. Each line contains
        named attributes of the warning, in a MIME-header-like format.
        The currently specified attributes are: line, offset, length,
        and text. Text MUST always be the last attribute. Sieve is
        specified in [SIEVE].

        email-sieve-warntxt = email-sieve-errtxt

    email.taboo-headers
        This multi-valued attribute is a list of header prefixes. If
        the client has a mode where it suppresses display of certain

headers and/or properties of messages, headers which start with
        a prefix included in this attribute are candidates for
        suppression. Prefix strings are case-insensitive.

        email-taboo   = 1*VCHAR

6. Examples

        entry   home
        email.connection-type   phone-modem
        email.personality   home
        email.server.pop   POP://jru;AUTH=APOP@pop.isp.com
        email.sieve.script   IF SIZE OVER 100k
                                        DISCARD;

        entry   work
        email.connection-type   direct
        email.personality   work
        email.server.imap   IMAP://jru@mail.bigcorp.com
        email.sieve.script   IF HEADER "FROM" IS "BOSS"
                                        FILEINTO "STUFF"

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8. Security Considerations

As with ACAP datasets in general, it is important that access
controls are set correctly on Email Account datasets. Besides the
server URLs, the Sieve script may contain highly personal
information which should not be disclosed except by explicit owner
request.

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