

An Application/Directory MIME Content-Type White Pages Person Profile

1. Status of this Memo

This document is an Internet-Draft. Internet-Drafts are working documents of the Internet Engineering Task Force (IETF), its areas, and its working groups. Note that other groups may also distribute working documents as Internet-Drafts.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as ``work in progress.''

To learn the current status of any Internet-Draft, please check the ``[1id-abstracts.txt](#)'' listing contained in the Internet-Drafts Shadow Directories on [ftp.is.co.za](#) (Africa), [nic.nordu.net](#) (Europe), [munnari.oz.au](#) (Pacific Rim), [ds.internic.net](#) (US East Coast), or [ftp.isi.edu](#) (US West Coast).

2. Abstract

This memo defines a directory information profile for a white pages person, to be carried in an application/directory MIME Content-Type. The profile consists of type definitions (e.g., for name and email address) and the corresponding format of values that each type is allowed to contain.

3. Overview

The application/directory MIME Content-Type defined in [MIME-DIR] is used for representing directory information in MIME format. It defines a general framework for carrying "type: value" style information in the body of a MIME message, but does not define specific types or values. This document defines a profile containing the types and corresponding value formats for representing information about an Internet white pages person. The profile reflects the Internet white pages service schema defined in [[DIR-WPP](#)].

4. The White Pages Person Profile

The profile is defined as follows, using the profile registration template from [Section 8](#) of [MIME-DIR].

4.1. Person profile definition

To: ietf-mime-direct@umich.edu

Subject: Registration of application/directory MIME profile wpperson

Profile name: wpperson

Profile purpose: to hold white pages information about a person

Profile types: address, cn, sn, email, o, phone, misc, lastmoddate, lastmodby, lastmodtype, dataowner, datasource

The associated type definitions follow, using the type registration template from [Section 9](#) of [MIME-DIR].

4.2. Address Type Definition

To: ietf-mime-direct@umich.edu

Subject: Registration of application/directory MIME type address

Type name: address

Type purpose: to hold postal address information

Type encoding: a sequence of text lines separated by <CRLF> SPACE

Type special notes: The usual line-folding technique described in [MIME-DIR] can be used to represent multi-line addresses (i.e., applications should interpret folded address lines as separate lines in a single address, not a continuation of one address line).

4.3. Cn Type Definition

To: ietf-mime-direct@umich.edu

Subject: Registration of application/directory MIME type cn

Type name: cn

Type purpose: to hold a name

Type encoding: text

4.4. Sn Type Definition

To: ietf-mime-direct@umich.edu
Subject: Registration of application/directory MIME type sn

Type name: sn

Type purpose: to hold a last name, family name, or surname

Type encoding: text

4.5. Email Type Definition

To: ietf-mime-direct@umich.edu
Subject: Registration of application/directory MIME type email

Type name: email

Type purpose: to hold an Internet email address

Type encoding: text representing an email address as defined in section 6.1 of [[RFC-822](#)]

4.6. O Type Definition

To: ietf-mime-direct@umich.edu
Subject: Registration of application/directory MIME type o

Type name: o

Type purpose: to hold an organization name

Type encoding: text

4.7. Phone Type Definition

To: ietf-mime-direct@umich.edu
Subject: Registration of application/directory MIME type phone

Type name: phone

Type purpose: to hold a voice, fax, cellular, mobile, or other type of telephone phone number

Type encoding: text

Type special notes:

If this type is to be used to hold multiple kinds of telephone numbers (e.g., fax and voice), it is advisable to distinguish them with some kind of descriptive comment in the value. For example:

phone: +1 313 747-4454 (voice)
phone: +1 313 764-5140 (fax)

4.8. Misc Type Definition

To: ietf-mime-direct@umich.edu
Subject: Registration of application/directory MIME type misc

Type name: misc

Type purpose: to hold miscellaneous information

Type encoding: text

Type special notes:

This type is intended to hold miscellaneous descriptive information about a person that does not fit in one of the other types defined above. It should not be used to hold information for which other types have been defined.

4.9. Lastmodby Type Definition

To: ietf-mime-direct@umich.edu
Subject: Registration of application/directory MIME type lastmodby

Type name: lastmodby

Type purpose: to hold the directory name of the entity which last modified a directory entity

Type encoding: text

Type special notes:

Note that the text encoding of the directory name may be directory service specific.

4.10. Lastmoddate Type Definition

To: ietf-mime-direct@umich.edu
Subject: Registration of application/directory MIME type lastmoddate

Type name: lastmoddate

Type purpose: to hold the time when a directory entity was last modified

Type encoding: a string containing a time as defined in section 5.1 of [[RFC-822](#)] for "date-time".

4.11. Lastmodtype Type Definition

To: ietf-mime-direct@umich.edu

Subject: Registration of application/directory MIME type lastmodtype

Type name: lastmodtype

Type purpose: to hold the type of information last modified in a directory entity

Type encoding: text containing a type name as defined in [section 5](#) of [MIME-DIR] for "type".

4.12. Dataowner Type Definition

To: ietf-mime-direct@umich.edu

Subject: Registration of application/directory MIME type dataowner

Type name: dataowner

Type purpose: to identify the owner of directory information pertaining to an entity

Type encoding: text

4.13. Datasource Type Definition

To: ietf-mime-direct@umich.edu

Subject: Registration of application/directory MIME type datasource

Type name: datasource

Type purpose: to identify the source of directory information pertaining to an entity

Type encoding: text

5. Examples

The following example illustrates simple use of the "application/directory" Content-Type with the "person" profile.

From: Whomever
To: Someone
Subject: whatever
MIME-Version: 1.0
Message-ID: <id1@host.net>
Content-Type: application/directory; profile="person"
Content-ID: <id2@host.com>

cn: Babs Jensen
cn: Barbara J Jensen
sn: Jensen
email: babs@umich.edu
phone: +1 313 747-4454 (voice)
phone: +1 313 764-5140 (fax)

The next example illustrates the use of RFC 1522 encoding to include non-ascii characters in some of the "person" profile types.

Content-Type: application/directory;
 profile="person";
 charset="iso-8859-1"
Content-ID: <id3@host.com>
Content-Transfer-Encoding: Quoted-Printable

cn: Bj=F8rn Jensen
sn: Jensen
address: 535 W. William St.
 Ann Arbor, MI 48103
email: bjorn@umich.edu
phone: +1 313 747-4454

6. Security Considerations

Internet mail is subject to many well known security attacks, including monitoring, replay, and forgery. Applications should also take care to display directory data in a "safe" environment (e.g., PostScript-valued types).

7. Acknowledgements

This material is based upon work supported by the National Science Foundation under Grant No. NCR-9416667.

8. Bibliography

[[RFC-1777](#)]Yeong, W., Howes, T., Kille, S., "Lightweight Directory Access Protocol", Request for Comment (RFC) 1777, March 1995.

- [[RFC-1778](#)]Howes, T., Kille, S., Yeong, W., Robbins, C.J., "The String Representation of Standard Attribute Syntaxes", Request for Comment (RFC) 1778, March 1995.
- [RFC-822] Crocker, D., "Standard for the Format of ARPA Internet Text Messages", STD 11, [RFC 822](#), August 1982.
- [[RFC-1521](#)]Borenstein, N., Freed, N., "MIME (Multipurpose Internet Mail Extensions) Part One: Mechanisms for Specifying and Describing the Format of Internet Message Bodies", RFC 1521, September 1993.
- [[RFC-1522](#)]Moore, K., "MIME (Multipurpose Internet Mail Extensions) Part Two: Message Header Extensions for Non-ASCII Text", [RFC 1522](#), September 1993.
- [x500] "Information Processing Systems - Open Systems Interconnection - The Directory: Overview of Concepts, Models and Services", ISO/IEC JTC 1/SC21, International Standard 9594-1, 1988.
- [[RFC-1835](#)]Deutsch, P., Schoultz, R., Faltstrom, P., Weider, C., "Architecture of the WHOIS++ service", August 1995.
- [MIME-DIR]Howes, T., Smith, M., "A MIME Content-Type for Directory Information," Internet-Draft [draft-ietf-asid-mime-direct-01.txt](#), January, 1996.
- [DIR-WPP] Genovese, T., "A Common Schema for the Internet White Pages Service," Internet-Draft [draft-ietf-ids-iwps-schema-spec-00.txt](#), November 1995.

[9.](#) Author's Address

Tim Howes
University of Michigan
535 W William St.
Ann Arbor, MI 48103-4943
USA
+1 313 747-4454
tim@umich.edu

Mark Smith
University of Michigan
535 W William St.
Ann Arbor, MI 48103-4943
USA
+1 313 764-2277
mcs@umich.edu

10. [Appendix A](#) - Correspondence With Various Directory Services

The scheme defined here is intended to be general enough to work with any number of directory services, including, but not limited to LDAP [[RFC-1777](#)], WHOIS++ [[RFC-1835](#)], SOLO, and X.500 [[x500](#)]. This appendix provides a mapping between attribute types or fields in these directory services and the scheme defined here.

type	name in LDAP/X.500	name in SOLO	name in WHOIS++

address	postalAddress	Work-address	Work-Postal
	homePostalAddress		Home-Postal
cn	commonName	Name	Name
	cn	CommonName	
sn	surname	Surname	
	sn		
email	rfc822Mailbox	Email-address	Email
	mail	rfc822Mailbox	
	mhsORAddresses	X400	
o	organizationName	Organization	Organization-
	o		
phone	telephoneNumber	Work-telephone	Work-Phone
	homeTelephoneNumber	Fax-telephone	Home-Phone
	facsimileTelephoneNumber		Work-Fax Home-Fax

