Table 19.3   Applicability of Subtype Value Sets

Type (or derived from such a type by tagging)	Single Value	Contained Subtype	Value Range	Size Constraint	Permitted Alphabet	Inner Subtyping
Boolean	✔	✔				
Integer	✔	✔	✔			
Enumerated	✔	✔				
Real	✔	✔	✔			
Object Identifier	✔	✔				
Bit String	✔	✔		✔		
Octet String	✔	✔		✔		
Character String Types	✔	✔		✔	✔	
Sequence	✔	✔				✔
Sequence-of	✔	✔		✔		✔
Set	✔	✔				✔
Set-of	✔	✔		✔		✔
Any	✔	✔				
Choice	✔	✔				✔

Table 19.5   SMTP Commands

Name	Command Form	Description
HELO	HELO <SP> <domain> <CRLF>	Send identification
MAIL	MAIL <SP> FROM:<reverse-path> <CRLF>	Identifies originator of mail
RCPT	RCPT <SP> TO:<forward-path> <CRLF>	Identifies recipient of mail
DATA	DATA <CRLF>	Transfer message text
RSET	RSET <CRLF>	Abort current mail transaction
NOOP	NOOP <CRLF>	No operation
QUIT	QUIT <CRLF>	Close TCP connection
SEND	SEND <SP> FROM:<reverse-path> <CRLF>	Send mail to terminal
SOML	SOML <SP> FROM:<reverse-path> <CRLF>	Send mail to terminal if possible; otherwise to mailbox
SAML	SAML <SP> FROM:<reverse-path> <CRLF>	Send mail to terminal and mailbox
VRFY	VRFY <SP> <string> <CRLF>	Confirm user name
EXPN	EXPN <SP> <string> <CRLF>	Return membership of mailing list
HELP	HELP [<SP> <string>] <CRLF>	Send system-specific documentation
TURN	TURN <CRLF>	Reverse role of sender and receiver

<CRLF> = carriage return, line feed

\<SP\> = space

square brackets denote optional elements

shaded commands are optional in a conformant SMTP implementation

Table 19.7 MIME Content Types

Type	Subtype	Description
Text	Plain	Unformatted text; may be ASCII or ISO 8859.
Multipart	Mixed	The different parts are independent but are to be transmitted together. They should be presented to the receiver in the order that they appear in the mail message.
	Parallel	Differs from Mixed only in that no order is defined for delivering the parts to the receiver.
	Alternative	The different parts are alternative versions of the same information. They are ordered in increasing faithfulness to the original and the recipient's mail system should display the "best" version to the user.
	Digest	Similar to Mixed, but the default type/subtype of each part is message/rfc822
Message	rfc822	The body is itself an encapsulated message that conforms to RFC 822.
	Partial	Used to allow fragmentation of large mail items, in a way that is transparent to the recipient.
	External-body	Contains a pointer to an object that exists elsewhere.
Image	jpeg	The image is in JPEG format, JFIF encoding.
	gif	The image is in GIF format.
Video	mpeg	MPEG format.
Audio	Basic	Single-channel 8-bit ISDN mu-law encoding at a sample rate of 8 kHz.
Application	PostScript	Adobe Postscript
	octet-stream	General binary data consisting of 8-bit bytes.