295
UTL_MAIL

The `UTL_MAIL` package is a utility for managing email which includes commonly used email features, such as attachments, CC, and BCC.

This chapter contains the following topics:

- Security Model
- Operational Notes
- Rules and Limits
- Summary of UTL_MAIL Subprograms

UTL_MAIL Security Model

`UTL_MAIL` is not installed by default because of the `SMTP_OUT_SERVER` configuration requirement and the security exposure this involves. In installing `UTL_MAIL`, you should take steps to prevent the port defined by `SMTP_OUT_SERVER` being swamped by data transmissions.

This package is now an invoker's rights package and the invoking user will need the connect privilege granted in the access control list assigned to the remote network host to which he wants to connect.

> **Note:**
>
> For more information about managing fine-grained access, see *Oracle Database Security Guide*.

UTL_MAIL Operational Notes

You must both install `UTL_MAIL` and define the `SMTP_OUT_SERVER`.

- To install UTL_MAIL:

```
sqlplus sys/<pwd>
SQL> @$ORACLE_HOME/rdbms/admin/utlmail.sql
SQL> @$ORACLE_HOME/rdbms/admin/prvtmail.plb
```

- You define the `SMTP_OUT_SERVER` parameter in the `init.ora rdbms` initialization file. However, if `SMTP_OUT_SERVER` is not defined, this invokes a default of `DB_DOMAIN` which is guaranteed to be defined to perform appropriately.

UTL_MAIL Rules and Limits

Use `UTL_MAIL` only within the context of the ASCII (American Standard Code for Information Interchange) and EBCDIC (Extended Binary-Coded Decimal Interchange Code) codes.

Summary of UTL_MAIL Subprograms

This table lists the `UTL_MAIL` subprograms and briefly describes them.

Table 295-1   UTL_MAIL Package Subprograms

Subprogram	Description
SEND Procedure	Packages an email message into the appropriate format, locates SMTP information, and delivers the message to the SMTP server for forwarding to the recipients
SEND_ATTACH_RAW Procedure	Represents the `SEND` Procedure overloaded for `RAW` attachments
SEND_ATTACH_VARCHAR2 Procedure	Represents the `SEND` Procedure overloaded for `VARCHAR2` attachments

SEND Procedure

This procedure packages an email message into the appropriate format, locates SMTP information, and delivers the message to the SMTP server for forwarding to the recipients.

It hides the SMTP API and exposes a one-line email facility for ease of use.

Syntax

```
UTL_MAIL.SEND (
   sender      IN    VARCHAR2 CHARACTER SET ANY_CS,
   recipients  IN    VARCHAR2 CHARACTER SET ANY_CS,
   cc          IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
   bcc         IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
   subject     IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
   message     IN    VARCHAR2 CHARACTER SET ANY_CS,
   mime_type   IN    VARCHAR2 DEFAULT 'text/plain; charset=us-ascii',
   priority    IN    PLS_INTEGER DEFAULT 3,
   replyto     IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL);
```

Parameters

Table 295-2   SEND Procedure Parameters

Parameter	Description
`sender`	Email address of the sender
`recipients`	Email addresses of the recipient(s), separated by commas
`cc`	Email addresses of the CC recipient(s), separated by commas, default is `NULL`
`bcc`	Email addresses of the BCC recipient(s), separated by commas, default is `NULL`
`subject`	String to be included as email subject string, default is `NULL`
`message`	Text message body
`mime_type`	Mime type of the message, default is `'text/plain; charset=us-ascii'`

Table 295-2   (Cont.) SEND Procedure Parameters

Parameter	Description
priority	Message priority, which maps to the X-priority field. 1 is the highest priority and 5 the lowest. The default is 3.
replyto	Defines to whom the reply email is to be sent

SEND_ATTACH_RAW Procedure

This procedure is the SEND Procedure overloaded for RAW attachments.

Syntax

```
UTL_MAIL.SEND_ATTACH_RAW (
   sender          IN    VARCHAR2 CHARACTER SET ANY_CS,
   recipients      IN    VARCHAR2 CHARACTER SET ANY_CS,
   cc              IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
   bcc             IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
   subject         IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
   message         IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
   mime_type       IN    VARCHAR2 DEFAULT CHARACTER SET ANY_CS
                             DEFAULT 'text/plain; charset=us-ascii',
   priority        IN    PLS_INTEGER DEFAULT 3,
   attachment      IN    RAW,
   att_inline      IN    BOOLEAN DEFAULT TRUE,
   att_mime_type   IN    VARCHAR2 CHARACTER SET ANY_CS
                                    DEFAULT 'text/plain; charset=us-ascii',
   att_filename    IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
   replyto         IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL);
```

Parameters

Table 295-3   _SEND_ATTACH_RAW Procedure Parameters_

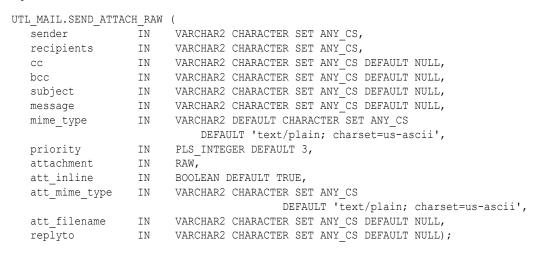| Parameter	Description
sender	Email address of the sender
recipients	Email addresses of the recipient(s), separated by commas
cc	Email addresses of the CC recipient(s), separated by commas, default is NULL
bcc	Email addresses of the BCC recipient(s), separated by commas, default is NULL
subject	String to be included as email subject string, default is NULL
message	Text message body
mime_type	Mime type of the message, default is 'text/plain; charset=us-ascii'
priority	Message priority, which maps to the X-priority field. 1 is the highest priority and 5 the lowest. The default is 3.
attachment	RAW attachment
att_inline	Specifies whether the attachment is viewable inline with the message body, default is TRUE

Table 295-3 (Cont.) *SEND_ATTACH_RAW Procedure Parameters*

Parameter	Description
att_mime_type	Mime type of the attachment, default is 'application/octet'
att_filename	String specifying a filename containing the attachment, default is NULL
replyto	Defines to whom the reply email is to be sent

SEND_ATTACH_VARCHAR2 Procedure

This procedure is the SEND Procedure overloaded for VARCHAR2 attachments.

Syntax

```
UTL_MAIL.SEND_ATTACH_VARCHAR2 (
    sender           IN    VARCHAR2 CHARACTER SET ANY_CS,
    recipients       IN    VARCHAR2 CHARACTER SET ANY_CS,
    cc               IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
    bcc              IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
    subject          IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
    message          IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL,
    mime_type        IN    VARCHAR2 CHARACTER SET ANY_CS
                                        DEFAULT 'text/plain; charset=us-ascii',
    priority         IN    PLS_INTEGER DEFAULT 3,
    attachment       IN    VARCHAR2 CHARACTER SET ANY_CS, ,
    att_inline       IN    BOOLEAN DEFAULT TRUE,
    att_mime_type    IN    VARCHAR2 CHARACTER SET ANY_CS
                                        DEFAULT 'text/plain; charset=us-ascii,
    att_filename     IN    VARCHAR2CHARACTER SET ANY_CS DEFAULT NULL,
    replyto          IN    VARCHAR2 CHARACTER SET ANY_CS DEFAULT NULL);
```

Parameters

Table 295-4 SEND_ATTACH_VARCHAR2 Procedure Parameters

Parameter	Description
sender	Email address of the sender
recipients	Email addresses of the recipient(s), separated by commas
cc	Email addresses of the CC recipient(s), separated by commas, default is NULL
bcc	Email addresses of the BCC recipient(s), separated by commas, default is NULL
subject	String to be included as email subject string, default is NULL
message	Text message body
mime_type	Mime type of the message, default is 'text/plain; charset=us-ascii
priority	Message priority, which maps to the X-priority field. 1 is the highest priority and 5 the lowest. The default is 3.
attachment	Text attachment
att_inline	Specifies whether the attachment is inline, default TRUE

Table 295-4   (Cont.) SEND_ATTACH_VARCHAR2 Procedure Parameters

Parameter	Description
att_mime_type	Mime type of the attachment, default is `'text/plain; charset=us-ascii'`
att_filename	String specifying a filename containing the attachment, default is `NULL`
replyto	Defines to whom the reply email is to be sent