Digitally signing emails

This document is an extract from the book *Ecommerce - Legal Issues* authored by Rohas Nagpal. This book is available as courseware for the **Diploma in Cyber Law** and **PG Program in Cyber Law** conducted by Asian School of Cyber Laws
6. Digitally signing emails

This chapter serves as a step by step guide for digitally signing emails using Microsoft Outlook (version 2003 is used in this chapter). The basic steps are as under:

1. Configure your email account using Microsoft Outlook. The exact information to be entered (such as server details etc) would depend upon the email service used by you. The image below illustrates the basic configuration for a gmail account.

![Email Account Configuration](image)

![Email Account Configuration](image)
2. Go to the Tools \n\nOptions \n\nSecurity \n\noption of Microsoft Outlook.

The following screen opens up.

Check the “Add Digital Signatures to outgoing messages” option. Then click on “Settings”. The following screen will open up.
Click on the “Choose” button next to the **Signing Certificate** option. The following screen will open up.

**Note:** In this illustration we are going to use the digital signature certificate issued to Rohas Nagpal having the email ID rn@asianlaws.org

Click on “OK”. The following screen will open up.

Add a suitable title for the **Security Settings Name** (e.g. “Rohas Nagpal” in this case). Then click on “OK”.
The following screen will open up.

![Options window](image)

Click on “Apply” and then click on “OK”.

Now compose and send an email. All emails sent using the rm@asianlaws.org account will be automatically signed. Let us presume that an email has been sent from rm@asianlaws.org to sanyanagpal@gmail.com

The sanyanagpal@gmail.com account is accessed by Sanya Nagpal using Microsoft Outlook. When Sanya received the digitally signed email from Rohas Nagpal, it will appear as under:

![Message window](image)
Notice the icon marked with a circle in the image above. Clicking on it opens up the following screen:

Digital Signature: Valid

Subject: Hello
From: Rohas Nagpal
Signed By: rm@asanlaws.org

The digital signature on this message is Valid and Trusted.

For more information about the certificate used to digitally sign the message, click Details.

[ ] Warn me about errors in digitally signed e-mail before message opens.

Close

It is clearly stated that “The digital signature on this message is Valid and Trusted”. Clicking on the “Details” button opens up the following screen:

Message Security Properties

Subject: Hello
Messages may contain encryption and digital signature layers. Each digital signature layer may contain multiple signatures.

Security Layers
Select a layer below to view its description.

[ ] Subject: Hello

[ ] Digital Signature Layer

Signed by: rm@asanlaws.org

Description:

Click any of the following buttons to view more information about or make changes to the selected layer:

[ ] Edit Trust...
[ ] View Details...
[ ] Trust Certificate Authority...

[ ] Warn me about errors in digitally signed e-mail.

Close
Clicking on “View Details” shows the relevant signature information as under:

![Signature Information]

- **Message format:** SMIME
- **Signed by:** m@asianlaws.org
- **Signature status:** OK
- **Signing time:** 5:34:04 PM 11/20/2007
- **Digest algorithm:** SHA1
- **Signature algorithm:** RSA (1024-bits)

![Certificate Information]

- **Issued by:** Tata Consultancy Services Certifying
- **Certificate status:** OK
Head Office
6th Floor, Pride Senate,
Behind Indiabulls Mega Store,
Senapati Bapat Road,
Pune - 411016.
India

Contact Numbers
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