Setting up secure e-mail communication with Ericsson

Guideline for Ericsson partners
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Introduction

Ericsson demands secure communication of sensitive information. Sending encrypted e-mails is a solution for protecting sensitive information.

- E-mail encryption protects the information being sent and ensures that only the intended recipients can read message content.

- It also ensures that the content of the e-mail is unaltered. Your own IT department should instruct you how to share encryption keys and send encrypted e-mails. This presentation states the Ericsson guidelines.

- Confidential information should always be protected using e-mail encryption.

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Technical prerequisites (1/2)

- Ericsson follows the international S/MIME standard for e-mail encryption.
- Everyone who wishes to communicate securely with Ericsson should use a solution compatible with the S/MIME standard.
- In order to send secure e-mail to Ericsson you need:
  - A X.509 standard compliant certificate.
- The following software needs to be pre-installed with the certificate.
  - S/MIME Compatible e-mail Software
    - Mozilla Thunderbird
    - Other equivalent e-mail software
  - Web browser
    - Internet Explorer
    - Mozilla (Firefox, Netscape, Apple Safari)
- If the IT department needs guidance they can contact Ericsson Extranet Support at exactextranet.support@ericsson.com or by calling +46 10 7133085.
If there is no valid e-mail encryption certificate, you should obtain a certificate from the relevant certification authority. If the company or organization does not have the possibility to get a certificate, it can be downloaded from a trusted source on the Internet.

Below you will find companies that provides certificates:

- **Comodo** (From $7.20 per certificate per year)
- **Geotrust** (From $19.95 per certificate per year)
- **VeriSign** (From $19.95 per certificate per year)

- An example of certificate installation; see detailed instructions on how to install a VeriSign certificate

- If the company or organization already has a valid e-mail encryption certificate, the person that will send encrypted e-mails, must share the Public Key with the Ericsson contact to exchange encrypted e-mail. (See instructions on following pages)
Getting started
Exchanging Public Keys and sending a signed e-mail

To be able to send and receive encrypted e-mails, you must exchange signed e-mails with your Ericsson contact so he/she can get your Public Key.

1. Send a signed e-mail to your Ericsson contact. This will indicate to your Ericsson contact that you have a certificate that you are ready to receive his/her signed mail.

2. When you get a signed e-mail from your Ericsson contact you must save him/her in your e-mail contact list. If the contact is already in your e-mail contacts, be sure to re-save it from the signed e-mail.

3. If the Ericsson contact sent the first signed e-mail, you must send a signed e-mail back to the Ericsson contact as well in order for him/her to get your Public Key. This is done by:
   - Write your message as usual
   - Select the Digitally Sign Message icon at the top of the message toolbar.
   - Click send (your Public Key will now be sent along with the e-mail)

4. Now you can send encrypted e-mails to your Ericsson contact.

Note! The signed e-mail function is mostly used to exchange Public Keys; this will not protect the content!
Sending encrypted e-mails

It is important to encrypt the message before sending it.

1. Write your message as usual.

2. Select the *Encrypt Message Contents and Attachments* icon at the top of the message toolbar.

3. Click Send.
   - The message’s content, and its potential attachments, are encrypted.
   - Only the sender and the recipients are able to read the encrypted e-mail.
Certificate enrolment and setup using VeriSign

Example of Certificate installation
1. Go to the **VeriSign enrolment site**

2. Choose your browser type. Select Netscape if you have a Mozilla browser (Firefox, Netscape, Safari)

3. Complete the enrolment form:
   - Enter your details.
   - Select Cryptographic Service provider. If available, select “Microsoft Enhanced Cryptographic Provider v1.0”.
   - Make sure that you enable protection of your Private Key by checking the checkbox for additional security.
1.b Installation - Certificate enrolment
Guidelines for VeriSign

4. Allow any potential scripting dialog that appears.

5. Select **Security Level** (1).

6. Set the security level to **High**, requiring a password when using the certificate (i.e. signing an e-mail) (2).

7. Choose a password. Use 8 characters, at least with one upper case and one number as a good password policy. Click **Finish** (3).

8. Click **OK** on the next dialog (4).
1.c Installation - Certificate enrolment
Guidelines for VeriSign

9. Check your e-mail and follow the instructions in the e-mail (1).

10. Enter the Digital ID **Personal Identification Number (PIN)** provided in the e-mail in the next step of the enrolment process (2).

11. Click **Install** to download and install the certificate (3).

12. Accept the Potential Scripting Violation dialog that appears two times.

13. You have successfully installed a certificate when you see screen 4.
2 Installation - Certificate association with your e-mail account

Open Outlook → In the tools menu select **Options** (1) → Select the **Security** tab (2) → Click on **Settings** to change your Security Settings (3) → Click **Choose** on the next dialog and make sure you use the correct certificate (4).

You have now enabled the signing and encryption functionalities to be used for sending Secure e-mail to Ericsson users. These icons are displayed when creating a new e-mail.
Instructions for PGP users
Introduction

If you use PGP as your e-mail encryption software you must obtain a digital ID (certificate) in both cases. These instructions show how to use certificates with PGP.

1. **PGP version 8.x or below (8.1 tested)**
   It is possible to use PGP version 8.x or below to encrypt or sign e-mails sent to Ericsson users. S/MIME options in Outlook interfere with PGP and may cause problems when encrypting or signing e-mail. Therefore S/MIME options must be turned off in Outlook.

2. **PGP version 9.x or above (9.5 tested)**
   PGP version 9.0 and above support S/MIME and it is therefore possible to use S/MIME options and PGP at the same time.

   - **Issues with PGP desktop**
     When you need to send signed or encrypted e-mails to other PGP users you will get this dialog warning. In most cases it is ok to click **Yes** and the message will be encrypted correctly.
Turning off S/MIME options in Outlook
For PGP Desktop 8.x or below

You can switch between PGP and S/MIME in order to reliably send PGP encrypted e-mails to Non-Ericsson users

1. In Outlook select *Options* from the Tools menu.
2. Select the *Security* Tab.
3. Click on *Settings* to change your Security Settings.
4. Select each of your Security Setting Names and click *Delete.*

*Note that you don’t delete your certificates permanently. They are only temporarily disabled in Outlook until you associate your certificates with your e-mail account again.*
Exchanging Public Keys
For PGP Desktop 9.x and above

In order to be able to send an encrypted e-mail to a user within Ericsson, you must exchange Public Keys:

1. First, ask the Ericsson user to send you a signed e-mail.
2. Once you have received the e-mail, click on the PGP icon shortcut menu in the system tray and stop the PGP services.
3. You must then add the user to your **Outlook Contacts**.*
4. Next, you must restart your PGP services again in order to read your PGP encrypted e-mails. Do this from the start menu. You can now send encrypted e-mails to that Ericsson user.
5. Send a signed e-mail back to the Ericsson user as well in order for him/her to send encrypted e-mail to you.

* You may need to select another e-mail and then reselect the signed e-mail in order for the signature to be visible.
Secure E-Mail Communication with Ericsson