DOKUMEN TERBATAS



PANDUAN PEMBANGKIT DAN PENGGUNAAN PGP KEY

PEMERINTAH PROVINSI SULAWESI TENGAH



DINAS KOMUNIKASI, INFROMATIKA, PERSANDIAN, DAN STATISTIK PROVINSI SULAWESI TENGAH

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Tabel Versi Dokumen

No	Versi	Tanggal	Deskripsi Perubahan
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PENDAHULUAN

Thunderbird adalah aplikasi klien email *open-source* yang dikembangkan oleh *Mozilla Foundation*, yang juga dikenal sebagai pengembang Firefox. Aplikasi ini dirancang untuk membantu pengguna mengelola email mereka dengan mudah, efisien dan menerapkan berbagai fitur keamanan, termasuk enkripsi pesan dan perlindungan terhadap *spam* dan *phishing*.

catatan: harus menggunakan email `.go.id`.

LANGKAH KERJA

A. INSTALASI THUNDERBIRD & KONFIGURASI AKUN

1. Buka browser, kemudian download aplikasi thunderbird melalui link di bawah ini:

https://www.thunderbird.net/en-US/download/

catatan: pada pilihan `operating system`, sesuaikan dengan jenis sistem operasi yang anda gunakan.

2. Instal aplikasi thunderbird seperti menginstal aplikasi pada umumnya dan tunggu sampai proses instalasi selesai.

🛃 Marilla Taurada de Calura	
Installing Please wait while Mozilla Thunderbird is being installed.	6
Installing Thunderbird	
< Back Next >	Cancel

3. Buka aplikasi thunderbird, kemudian klik menu `Account Settings`

\boxtimes		Search CTRL + K		٩	≡ -	ø ×		
A		C Local Folders			() Account Se	ttings	^	
	✓ ■ Local Folders ☆ Trash ③ Outbox	Q. Search messages tii Manage message filters						
Q		Set Up Another Account						
		🖂 Email 🛛 🥘 Address Book 🕅 Calen	idar 🤤 Chat	🔗 Filelink 🔊 Feeds				
		🖽 Newsgroups						
		Import from Another Program						
		Thunderbird lets you import mail messages, address book entries, feed sub filters from other mail programs and common address book formats.	bscriptions, settings, and/or					
		Import						
	About Mozilla i hunderbird							
		Thunderbind is the leading open source, cross platform enail and calendaring client, free for business and personal use. We want it to stay secure and become even better. A donation will allow use is brie developers a porforinfrastructure, and continue to imrove.						
¢								
		Resources						
N-	(00) Done							

4. Pada menu `Account Actions` pilih `Add Mail Account`



5. Masukkan **nama**, **email** dan **password** yang akan anda gunakan. Kemudian klik **`continue`**

		Search CTRL + K		٩		×
A	🖿 Local Folders 🛛 🤅	Account Settings	× 🛛 Account Setup			
r N N	Set Up Your Existing To use your current email address fill Thunderbird will automatically search	Email Address in your credentials. for a working and recommended :	erver configuration.			
	Your full name					
	PERSANQUAN UKP SULEING Email address Persandun@diskominfo.sultengprov.go.i Pessaverd ••••••••••••••••••••••••••••••••••••	u id () @ @		Č,		
	Configure manually	Cancel Continue		>		
愈						
l←	(®) Done					

6. Pilih `IMAP` pada konfigurasi `Available Configurations` kemudian klik `Done`



7. Jika proses penambahan akun berhasil, maka akan tambil pesan informasi **`account successfully created`**

X		Search CTRL + K				٩	≡	-	٥	×
A	Local Folders	Account Settings	×	🛛 Account Setup	×					
	✓ Account success You can now use this account with You can improve the experience by	fully created Thunderbird. r connecting related services and con	figuring	g advanced account settings.						
	PERSANDIAN DKIPS SULTENG persandian@diskominfo.sultengp	prov.go.id								
	段 Account settings / Add a signature	 ℰ End-to-end encryption Oownload dictionaries 		**	(?)					
	Connect your linked service	ces								
	Setup other services to get the most or	ut of your Thunderbird experience.		Not sure - <u>Getting started</u>	ibout your nex iupport forum	t steps? - <u>Privacy policy</u>				
	② Connect to a CardDAV add	dress book								
	Connect to an LDAP addre	ss book								
	Connect to a remote calen	dar								
~										
έş										
l←	(0)									

B. KONFIGURASI END-TO-END ENCRYPTION

1. Masuk ke 'Account Settings'

\bowtie		Search CRR. + K		
A	B persandian@diskominfo.sultengprov	NO 🖗 Account Settings X		
	+ New Message …	📧 persandian@diskominfo.sultengprov.go.id	() Account Settin	igs 🗠
Q	V 🔄 persandian@diskominfo V 🖸 Inbox 18 E Drafts	🖲 Read messages 🖋 Write a new message 🔍 Search messages 🛛 tii Manage message filters 🎤 End-to-end Encryption		
	🔊 Sent 🕢	Set Up Another Account		
	👶 spam 🔟 Trash	🖻 Email 🔋 Address Book 💼 Calendar 😔 Chat 🔗 Filelink 🔈 Feeds		
	✓ ► Local Folders ★ Trash ★ Outbary	Newsgroups		
	bg Outbox	Import from Another Program		
		Thunderhird lets you import mail messages, address book entries, feed subscriptions, settings, and/or filters from other mail programs and common address book formats.		
		About Mozilla Thunderbird Thunderbird is finded by users like wall if you like Thunderbird is finded by users like wall if you like Thunderbird is	esce consider makin	
\$ ↓		Induced on a brunce by destine your i you are induced on a brunce by destine your i you are induced on a brunce by destine your i you are induced on a brunce by destine your i you are induced on a brunce by destine you are in	le is to <u>make a dona</u>	ion.

2. Klik menu `End-To-End Encryption`, kemudian klik tombol `Add Key`



3. Pilih 'Create a new OpenPGP Key', kemudian klik tombol 'Continue'



- 4. Lakukan konfigurasi PGP Key :
 - Key Expires in : 2 Years
 - Key Type : RSA
 - Key Size : 4096

Klik `Generate Key` jika telah selesai melakukan konfigurasi

\boxtimes	Search	
A	🛯 persandian@diskominfo.sultengprov.g	Settings X
- 9		Generate OpenPGP Key Identity PERSANDIAN DKIPS SULTENG <persandian@diskominfo.sultengprov.go.id> - persandian@</persandian@diskominfo.sultengprov.go.id>
		○ Key goes not expire a gout Key Advanced settings s not listed above. Control the advanced settings of your OpenPGP Key. Key type: Key gize: 4096
		tClar tClar
不感	dige Add-ons and memes	Generate key Go back Cancel

5. Klik `Confirm`

\boxtimes	Search	ans, κ <u>α</u> ≡ − σ ×
A	B persandian@diskominfo.sultengprov.g	ettings X
		 Key generation may take up to several minutes to complete. Do not exit the application while key generation is in progress. Advey browsing or performing disk-intensive operations during key generation will repleted the transformers pool and speed-up the process. You will be altered when key generation is completed. mass surveillance. peepGP or S/MIME. /MME. For a "mess advect key for PERSANDIAN DKIPS SULTENG "persandian@diskominfo.sultengprov.go.id"? Cancel Confirm Add Key

6. PGP Key berhasil dibuat



C. PENGIRIMAN PGP KEY

1. Pilih PGP Key yang telah dibuat, kemudian klik simbol `v`, dan klik `more`



2. Klik `send public key via email`

\bowtie	Search	cm. + x Q			
A	B persandian@diskominfo.sultengprov.g () Account	iettings X			
	✓ 図 persandian@diskominfo.sultengprov.go.id ★	Presandian@dikominfo.sultangprov.go.id Vour current configuration uses key ID 0xEA1882681673D6F Learn more	希 <u>A</u> dd Key		
	Server Settings Copies & Folders	✓ OpenPGP Key created successfully!			
	Composition & Addressing Junk Settings	O None			
	Synchronization & Storage	Do not use OpenPGP for this identity.			
	Return Receipts	O 0xEA18826B16F73D6F			
	V 🗈 Local Folders	Expires on: 7/31/2026 Publishing the public key on a keyserver allows others to discover it Publish			
	Junk Settings Disk Space B Outgoing Server (SMTP)	Grant and a part of the second and a se			
		🔦 Key Properties	More ∨		
	Account Actions V	Use the OpenPGP Key Manager to view and manage public keys of your correspondents and all other keys	Copy Public Key Send Public Key Via Emai Export Public Key To File		
	The Add-one and Themes	OpenPGP Key Manager	Backup Secret Key To File		
		S/MIME	<u>R</u> evoke Key <u>D</u> elete Key		
	(m)				

3. Kirim PGP Key email 1 ke email 2

Contoh: email 1 : persandian@diskominfo.sultengprov.go.id

email 2 : <u>csirt@sultengprov.go.id</u>



 Untuk email 2, diharuskan juga untuk mengirim PGP Key ke email 1 agar fitur End-To-End Encryption dapat digunakan saat saling mengirim pesan. kemudian simpan file PGP Key yang dikirim oleh email 2





D. PENGIRIMAN PESAN TER-ENKRIPSI

1. Klik `New Message`

X		Search CTRS + K	≡ -	٥	×		
A	B persandian@diskominfo.sultengpro	rg 🚱 Account Settings X 🕸 Settings X					
	🤤 🕂 New Message 🛛 …	💌 persandian@diskominfo.sultengprov.go.id	(Q) Account Se	ttings	^		
£ 2	V 🔀 persandian@diskominfo V 🔁 Inbox 🖲 Drafts	🖲 Read messages 🎤 Write a new message 🔍 Search messages 🛛 Hi Manage message filters 🎤 End-to-end Encryption					
	✓ Sent ✓ Archive D 2024	Set Up Another Account					
	d) spam	🖂 Email 🙆 Address Book 🧰 Calendar 🖓 Chat 🔗 Filelink 🚴 Feeds					
	🗑 Trash	🐵 Newsgroups					
	🗸 🛅 Local Folders						
	🗑 Trash						
	R Outbox Import from Another Program						
		Thunderbird lets you import mail messages, address book entries, feed subscriptions, settings, and/or filters from other mail programs and common address book formats.					
		e import					

2. Masukkan alamat email 2, subjek pesan, dan isi pesan, kemudian klik 'encrypt'



3. Jika setelah meng-klik `**encrypt**` muncul pesan seperti gambar di bawah, klik `**resolve**`



4. Klik `import public keys from file`



5. Pilih file PGP Key dari email 2 yang telah disimpan sebelumnya, klik 'open'

	Name	Date modified	Туре
OneDrive - Personal	0x9A499FC04F51770F - csirt@sultengprov.go.id	07/31/2024 15:13	ASC File
💻 This PC			
📃 Desktop			
🔮 Documents			
🕹 Downloads			
🁌 Music			
Pictures			
📳 Videos			
🏪 Windows System (C			
📥 Google Drive (G:)			
I Network			
÷	<		>
File na	ame:	✓ GnuPG Files	~
		Open	Cancel

6. Pilih `accepted`, kemudian klik `import`



7. PGP Key berhasil di-import, klik `ok`

🥌 Success! Keys imported	I						×
	CSIR	r Provinsi Su	lteng <csi< th=""><th>rt@sulteng</th><th>prov.go.id></th><th></th><th></th></csi<>	rt@sulteng	prov.go.id>		
	Bits	Created					
	4096	2/9/2023					
	Finge	rprint					
	8810	9371	89F5	5ACC	682A		
	4436	9A49	9FC0	4F51	770F		
	View						
						OK	
							2

 Pesan bahwa pengiriman pesan yang ter-enkripsi antara email 1 dan email 2 sudah dapat dilakukan

testing pesan terenkripsi OpenPGP Key Assistant This message can be encrypted. You have usable and accepted keys for all Show recipients. Close			
OpenPGP Key Assistant This message can be encrypted. You have usable and accepted keys for all Show recipients. Close	testing pesan terer	ıkripsi	
This message can be encrypted. You have usable and accepted keys for all Show recipients. Close		OpenPGP Key Assistant	
Close		This message can be encrypted. You have usable and accepted keys for all Show recipients.	
		Close	

9. Klik `send` untuk mengirim pesan, dan pastikan fitur encrypt telah aktif



10. Contoh pesan ter-enkripsi yang telah terkirim



catatan:

- 🔹 OpenPGP 🔐 😣
- : tanda bahwa email yang dikirim telah terenkripsi

REFERENSI

- 1. https://www.thunderbird.net/id/about/
- 2. <u>https://id.wikipedia.org/wiki/Mozilla_Thunderbird</u>