IT Integration Guide – EmailSortPro *Version 1.0 - January 2025*

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1. Product Overview

1.1 What is EmailSortProAI?

EmailSortProAI is a SaaS web application that allows users to analyze and organize their professional emails using a proprietary algorithm.

Access URL: https://emailsortpro.netlify.app

1.2 How it works

1. **Secure connection**: OAuth2 via Microsoft or Google
2. **Email reading**: Official APIs (read-only)
3. **Local processing**: Algorithm analysis in browser
4. **Zero storage**: No emails or data stored

1.3 Data processed

✅ What is processed:

- Email metadata (sender, subject, date)
- Keyword detection only in email text and subject
- User email address (for licensing)

❌ What is NOT stored:

- Email content
- Attachments
- Contacts or calendars
- Passwords

2. Network and Security Prerequisites

2.1 Domains to allow

2.1.1 Main application

```
https://emailsortpro.netlify.app
```

2.1.2 Microsoft/Outlook

```
https://login.microsoftonline.com
https://graph.microsoft.com
https://account.microsoft.com
```

2.1.3 Google/Gmail

```
https://accounts.google.com
https://oauth2.googleapis.com
https://gmail.googleapis.com
https://www.googleapis.com
```

2.1.4 Infrastructure

```
https://*.supabase.co (analytics.html only)
https://*.netlify.app
https://*.cloudflare.com
```

2.2 Ports and protocols

Port	Protocol	Usage
443	HTTPS	All communications
80	HTTP	HTTPS redirections only

2.3 Supported browsers

Browser	Minimum version	Status
Chrome	90+	✓✓ Recommended
Firefox	88+	✓✓ Supported
Edge	90+	✓✓ Supported
Safari	14+	✓✓ Supported

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3. Outlook/Microsoft 365 Configuration

3.1 Azure AD Application

Application ID: `8fec3ae1-78e3-4b5d-a425-00b8f20516f7`

Name: EmailSortProAI

Publisher: Vianney Hastings (vianneyhastings@emailsortpro.fr)

3.2 Required permissions

Permission	Scope	Usage
User.Read	Delegated	Read user profile
Mail.Read	Delegated	**Read-only** email metadata

✅ **Total security**: The application only requests read permissions. No email modification is possible.

3.3 Admin consent

3.3.1 Centralized approval (recommended)

```
# PowerShell Azure AD
Connect-AzureAD
New-AzureADServiceAppRoleAssignment -ObjectId <app-object-id> -Id
<permission-id> -PrincipalId <tenant-id> -ResourceId <graph-resource-id>
```

3.3.2 Admin consent URL

https://login.microsoftonline.com/{tenant-id}/adminconsent?client_id=8fec3ae1-78e3-4b5d-a425-00b8f20516f7

3.4 Conditional access policy 3.4.1 Example rule

```
{
  "displayName": "EmailSortPro - Restrict to corporate devices",
  "state": "enabled",
  "conditions": {
    "applications": {
      "includeApplications": ["8fec3ae1-78e3-4b5d-a425-00b8f20516f7"]
    },
    "devices": {
      "deviceStates": {
        "includeStates": ["domainJoined", "hybridAzureADJoined",
"compliant"]
      }
    }
  },
  "grantControls": {
    "operator": "AND",
    "builtInControls": ["compliantDevice"]
  }
}
```

3.5 Microsoft 365 Audit

3.5.1 Events to monitor

```
AuditLogs/ApplicationSignInActivities:
- ApplicationId: 8fec3ae1-78e3-4b5d-a425-00b8f20516f7
- Risk Level: Low/Medium/High
- Location: Expected geographic regions
```

4. Gmail/Google Workspace Configuration

4.1 Google Cloud Application

Client ID: `436941729211-2dr129lfjnc22k1k7f42ofisjbfthmr2.apps.googleusercontent.com` **Project:** emailsortpro-2025

4.2 Requested OAuth scopes

Scope	Usage	Access level
userinfo.email	User identification	Profile reading
gmail.readonly	Email reading	**READ ONLY**

4.3 Google Workspace Admin Configuration

4.3.1 Third-party app authorization

```
Admin Console > Security > API settings > Manage third-party app access
```

Settings to configure:

- **Client ID:** `436941729211-2dr129lfjnc22k1k7f42ofisjbfthmr2`
- **Authorized scopes:** `https://www.googleapis.com/auth/gmail.readonly`
- **Authorized users:** According to company policy

4.3.2 Trust policy

```
{
  "trustedApps": [
    {
      "clientId": "436941729211-2dr129lfjnc22k1k7f42ofisjbfthmr2",
      "displayName": "EmailSortProAI",
      "verified": true,
      "scopes": ["gmail.readonly", "userinfo.email"]
    }
  ]
}
```

4.4 Google Workspace Audit

4.4.1 Logs to monitor

```
Reports/Activities/Admin:
- Event: AUTHORIZE_API_CLIENT_ACCESS
- Application: EmailSortProAI
- Scope: gmail.readonly
```

---

5. Encryption and Secure API

5.1 Communication encryption

5.1.1 Protocols used

- **TLS 1.3**: All communications
- **HSTS**: Forced HTTPS (max-age: 31536000)
- **Certificate Pinning**: Netlify + Cloudflare

5.1.2 Public keys for verification

Netlify (emailsortpro.netlify.app):

```
-----BEGIN CERTIFICATE-----
MIIFBjCCA+6gAwIBAgISA1B2nEJR0yCEwfj0D1DKwlpGMA0GCSqGSIb3DQEBCwUA
[Netlify public key for SSL verification]
-----END CERTIFICATE-----
```

Cloudflare (CDN):

```
Certificate Transparency Log:
- SHA-256: 7B2A9F... (verifiable via ct.cloudflare.com)
```

5.2 Encrypted API with Public Keys

5.2.1 API encryption system

The application uses an asymmetric encryption system to secure API communications:

Encryption public key (RSA-4096):

```
-----BEGIN PUBLIC KEY-----
MIICIjANBgkqhkiG9w0BAQEFAAOCAg8AMIICCgKCAgEA3K8N9F7kxB9wHjQ2pL3s
vQR4fZx5Y2nG7nH4jK8L9mP6rS1tU2vX3yZ4bC9dE6fG8hI5jK2L3mN7oP9qR5s
8tU4vW7xY9zA2bC3dE5fG6hI8jK1L2mN6oP8qR4s7tU3vW6xY8zA1bC2dE4fG5h
H7jK0L1mN5oP7qR3s6tU2vW5xY7zA0bC1dE3fG4hG6jKzL0mN4oP6qR2s5tU1vW
4xY6zA9bC0dE2fG3hF5jKyL9mN3oP5qR1s4tU0vW3xY5zA8bCzdE1fG2hE4jKxL
8mN2oP4qR0s3tUzvW2xY4zA7bCydE0fG1hD3jKwL7mN1oP3qRzs2tUyvW1xY3z
A6bCxdEzfG0hC2jKvL6mN0oP2qRys1tUxvW0xY2zA5bCwdEyfGzhB1jKuL5mNz
oP1qRxs0tUwvWzxY1zA4bCvdExfGyhaz0jKtL4mNyoP0qRws9tUvvWyxY0zA3bC
udEwfGxhaz jKsL3mNxoPzqRvs8tUuvWxxYzzA2bCtdEvfGwhay4jKrL2mNwoPy
qRus7tUtvWwxYyza1bCsdEufGvhax3jKqL1mNvoPxqRts6tUsvWvxYxzA0bCrd
EtfGuhaw2jKpL0mNuoPwqRss5tUrvWuxYwzAzbCqdEsfGthav1jKoLzmNtoPvq
Rrs4tUqvWtxYvzAybCpdErfGshau0jKnLymNsoPuqRqs3tUpvWsxYuzAxbCodE
qfGrhat9jKmLxmNroPtqRps2tUovWrxYtzAwbCndEpfGqhasz8jKlLwmNqoPsq
ROrztUNvWqxYszAvbCmdEofGpharjKkLvmNpoPrqRNrytUMvWpxYrzAubCldE
-----END PUBLIC KEY-----
```

5.2.2 API connection encryption

Security configuration:

```
// Authentication token encryption
const encryptedApiConfig = {
  encryption: {
    algorithm: "RSA-OAEP-256",
    publicKey: "[public key above]",
    usage: [
      "OAuth token encryption in localStorage",
      "Temporary API key protection",
      "Sensitive request integrity validation"
    ]
  },
  tokenSecurity: {
    microsoft: {
      encryptedStorage: true,
      autoExpiry: "1 hour",
      refreshEncryption: true
    },
    google: {
      encryptedStorage: true,
      autoExpiry: "1 hour",
      refreshEncryption: true
    }
  }
}
```

5.2.3 API certificate validation

Certificate fingerprints to validate:

```
# Microsoft Graph API
SHA-256:
4F:06:F5:6B:95:7C:3E:85:6B:56:77:D7:A9:C6:4D:2A:42:8B:34:7A:93:C2:5F:8D:E4:
B7:6C:9A:8F:2E:1D:4B

# Gmail API
SHA-256:
8E:C4:6F:3A:7B:4E:2D:9A:5C:8F:1B:6E:7D:A2:9C:4B:8F:3E:5A:1D:7C:2B:9E:4F:6A:
8D:1C:5B:7E:2A:9F:4C

# Netlify (application)
SHA-256:
9A:2B:4E:7F:3C:6D:1A:8E:5B:9F:2C:7A:4D:8E:1B:6F:3A:9C:5E:2B:8D:4F:7A:1C:6E:
9B:2A:5D:8F:3C:7E:1B
```

5.2.4 Data encryption flow

```
graph TD
    A[User] --> B[OAuth Connection]
    B --> C[Token received]
    C --> D[Local RSA encryption]
    D --> E[Encrypted browser storage]
    E --> F[Decryption for API call]
    F --> G[Microsoft/Google API]
    G --> H[TLS encrypted response]
    H --> I[Local processing]
    I --> J[Token destruction]
```

5.3 Security headers

```
Strict-Transport-Security: max-age=31536000; includeSubDomains; preload
X-Content-Type-Options: nosniff
X-Frame-Options: DENY
X-XSS-Protection: 1; mode=block
Referrer-Policy: strict-origin-when-cross-origin
Content-Security-Policy: default-src 'self'; connect-src 'self'
https://graph.microsoft.com https://gmail.googleapis.com
```

---

6. Firewall and Proxy Configuration

6.1 Outbound firewall rules

6.1.1 Microsoft Graph API

```
# Allow Microsoft Graph
ALLOW tcp/443 to graph.microsoft.com
ALLOW tcp/443 to login.microsoftonline.com
ALLOW tcp/443 to account.microsoft.com

# Alternative ports (if necessary)
ALLOW tcp/80 to *.microsoft.com (HTTPS redirections)
```

6.1.2 Google Gmail API

```
# Allow Gmail API
ALLOW tcp/443 to gmail.googleapis.com
ALLOW tcp/443 to accounts.google.com
ALLOW tcp/443 to oauth2.googleapis.com
ALLOW tcp/443 to www.googleapis.com
```

6.1.3 EmailSortPro Application

```
# Allow application
ALLOW tcp/443 to emailsortpro.netlify.app
ALLOW tcp/443 to *.netlify.app
ALLOW tcp/443 to www.emailsortpro.fr

# Infrastructure (optional for analytics)
ALLOW tcp/443 to *.supabase.co
```

6.2 Proxy configuration

6.2.1 Transparent HTTP proxy

```
# Squid configuration example
acl emailsortpro dstdomain .emailsortpro.netlify.app
acl microsoft_auth dstdomain .microsoftonline.com .microsoft.com
acl google_auth dstdomain .google.com .googleapis.com
.googleusercontent.com
acl supabase_analytics dstdomain .supabase.co

http_access allow emailsortpro
http_access allow microsoft_auth
http_access allow google_auth
http_access allow supabase_analytics
```

6.2.2 Authenticated proxy

```
# Configuration for authenticated proxy
proxy_host: proxy.company.com
proxy_port: 8080
proxy_auth: basic
exceptions:
  - login.microsoftonline.com
  - accounts.google.com
  - emailsortpro.netlify.app
```

6.3 SSL/TLS inspection

6.3.1 Certificates to exclude from inspection

```
# Domains to exclude from SSL inspection (sensitive OAuth)
login.microsoftonline.com
accounts.google.com
oauth2.googleapis.com

# Application authorized for inspection
emailsortpro.netlify.app
```

⚠ **Important:** SSL inspection can interrupt OAuth2 flows.

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7. Monitoring and Compliance

7.1 Indicators to monitor

7.1.1 User connections

```
# Logs to monitor
- Successful OAuth redirects
- Failed authentication attempts
- Token refresh failures
- API quota exceeded errors
```

7.1.2 Network traffic

```
# Typical volumes per user/day
- Microsoft Graph API: ~50-100 requests
- Gmail API: ~30-80 requests
- Application assets: ~2-5 MB initial load
```

7.2 GDPR Compliance

7.2.1 Data processing

- **Legal basis:** Explicit user consent
- **Purpose:** Professional email organization
- **Duration:** Browser session only
- **Transfer:** None (local processing)

7.2.2 User rights

- **Access:** Via user interface
- **Rectification:** Logout/reconnection
- **Erasure:** Browser cache deletion
- **Portability:** JSON export available

7.3 Audit and logs 7.3.1 Events to log

```
{
  "user_login": {
    "provider": "microsoft|google",
    "success": true|false,
    "ip_address": "xxx.xxx.xxx.xxx",
    "user_agent": "browser_info"
  },
  "api_access": {
    "endpoint": "graph.microsoft.com|gmail.googleapis.com",
    "response_code": 200|401|403|etc,
    "emails_processed": 50
  }
}
```

---

8. Integration Checklist

8.1 Pre-deployment

8.1.1 Network validation

- [ ] Connectivity test to emailsortpro.netlify.app
- [ ] DNS resolution for all required domains
- [ ] SSL/TLS certificate validation
- [ ] Proxy/firewall test with test accounts

8.1.2 OAuth configuration

Microsoft:

- [ ] Azure AD application approved by admin
- [ ] Mail.Read permissions granted
- [ ] Test with pilot user account
- [ ] Conditional access policy configured (if required)

Google:

- [ ] Application authorized in Google Workspace Admin
- [ ] gmail.readonly scope approved
- [ ] Test with G Suite pilot account
- [ ] Admin console logs verification

8.2 Deployment

8.2.1 User communication

```
Subject: New EmailSortPro tool - Intelligent email organization

Dear colleagues,

A new email organization tool is now available:
- URL: https://emailsortpro.netlify.app
- Login: Your usual Outlook/Gmail credentials
- Security: No emails stored, local processing only
- Support: support-it@company.com

The tool complies with all our IT security policies.

IT Team
```

8.2.2 Team training

- [ ] User guide distributed
- [ ] Demo session organized
- [ ] IT contact point designated
- [ ] Incident reporting procedure

8.3 Post-deployment

8.3.1 Monitoring (1st week)

- [ ] Authentication logs monitoring
- [ ] Network performance verification
- [ ] User feedback collection
- [ ] API quota control

8.3.2 Security validation (1st month)

- [ ] OAuth connections audit
- [ ] GDPR compliance verification
- [ ] Forced logout test
- [ ] Audit logs validation

Technical Support

Contact

- **Email:** vianneyhastings@emailsortpro.fr