# DIRECTORY OF IDENTITY MANAGEMENT AND PROOFING PRODUCTS

The Directory of Identity Management and Proofing Products ("The Directory") is designed to provide industy with information on solutions that provide a service which confirms the authenticity of the government photo identification and matches the result to the image or video of a person.

The Directory is based on service providers who have completed a self-attestation of survey questions designed to gauge the extent to which their solutions are aligned with DIACC's Digital Identity Ecosystem Principles.

Background and why is this important.

In June 2019, Canada's regulatory environment moved to accepting innovative technologies to allow for reporting entities to use identification document capture and comparison tools to meet the requirements of anti-money laundering efforts. Reporting entities include Banks, Insurers, Securities, Realtors, Accountants, Notaries, Dealers in precious metals and money services businesses that are required to identify persons in a business relationship (plus other requirements). Additional tools to perform identification in a digital channel remain available using the credit bureau information and dual records from other reliable sources (e.g., Utility providers or regulated financial services).

Stakeholders and Benefits.

For service providers, this Directory provides awareness of the new Canadian marketplace expectations and new customers. The addition of these markets to start using applications to assess identification documents and verify identity is expected to expand the demand for digital identity solutions in Canada.

For consumers, more choice in how they provide identification. This empowerment of a new wave of sophisticated tools currently in use around the world may empower Canadian commerce to reduce customer friction and provide a secure tool for a person to both provide and access their own information and property.

For reporting entities; a centralized list of service providers and the start of an assessment process. To adopt these tools, reporting entities (for example banks, insurers, and security dealers) will be required to perform a risk assessment and document this exercise prior to use of the technology in their anti-money laundering programs. This survey will include many of the common questions used in the assessment of digital identification tools from an anti-money laundering perspective.

The Directory will be hosted by the DIACC and available free of charge to meet the objectives listed above. The Directory will also be provided to regulatory bodies to raise awareness of innovations in the marketplace available for regulated reporting entities to use. Membership in the DIACC is strongly encouraged for service providers and those interested in supporting the digital identity community in Canada.

### **DISCLAIMER**

The information contained in the Directory is for general information purposes only. While DIACC endeavours to keep the information up to date and correct, DIACC makes no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, certification or compliance status, suitability or availability with respect to the Directory or the information, products, services, or related graphics contained on the Directory for any purpose. Any reliance you place on such information is therefore strictly at your own risk.

In no event will DIACC, and its members, be liable for any loss or damage including without limitation, indirect or consequential loss or damage, or any loss or damage whatsoever arising from loss of data or profits arising out of, or in connection with, the use of the Directory.

### A. ABOUT THE SERVICE PROVIDER

A1. Please provide a brief description about your company: (250 words) \*

Vlinder's purpose is to enable inclusive and sustainable ecosystem with trust as underpinning foundation. Vlinder offers two Blockchain based platform solutions that bring inclusion and sustainability to the ecosystem including Private & Public enterprises.

Vlinder Platform Offerings are focused on helping Private and Public enterprises realize the UN Sustainable Development Goals

Vlinder Inc. was established in 2018 with offices in India and the USA.

A2. Please provide a brief description about your ID Capture technology: (250 words) \*

Klefki: Blockchain-based Secure, Frictionless ID and Credentials platform Klefki is a blockchain based secure, frictionless platform that enables trust, inclusion and efficiency to the ecosystem of Public and Private enterprises

### Klefki Enables individuals to:

- 1. Own Identity
- 2. Accept credentials from Issuers and Store Security in mobile wallet
- 3. Share credentials with Verifiers by consent, on demand basis
- 4. Disclose selective details of credentials (Proofs) as opposed to actual sensitive data

### Enables Issuers to:

- 1. Issue Credentials directly to Citizen's wallet
- 2. View list of Credentials Issued in dashboard

### Enables Verifiers to:

1. Verify Credentials of Citizens directly with Citizens

Klefki adheres to key standards including but not limited to:

- 1. W3C standards
- 2. GDPR
- 3. India's Data Protection Bill.

## Benefits include:

- 1. Individuals: Privacy, Inclusion and Simplicity to own and share credentials
- 2. Verifiers: Secure and Near-Realtime verification of credentials
- 3. Issuers: Cost efficient, Digital issuance of credentials

Clients in Caribbean Region, Canada, and India are onboarded onto the platform issuing & verifying credentials.

Vlinder is a member of DIACC - Canada, actively contributing to PCTF and Innovation Committee

A3. Please provide a brief description about complementary products or services: (250 words)

In addition to what's outlined in A2, klefki integrates with leading Biometric providers for Face Recognition

A4. What other solutions does your organization offer to help with identity verification and authentication? Note: what is the list of complimentary products and services.
3rd Party Data Source Validation (sanctions/AML political and corrupt person scanning)
Biometrics Authentication Methods (voice, pattern, behaviour, etc.)
Credential Based Authentication
Credit Bureau Validation
Credential Management (Issuance and Receipt)
Country Signer Certificate Authentication
Device Fingerprinting (e.g., device attributes to assess a digital identity)
✓ Digital signing of records
✓ Digital Wallets
Email Risk Assessment – association of name and address with email
Face ID in lieu of Credentials
Identity Access Management Integrations
Knowledge based authentication/question-based authentication
One-Time Password/Push Notification
Telecom Validation (Enstream in Canada, Telesign in the US)
<b>✓</b> Other
Additional Comments

A5. Please list any other service providers which include your technology which are available in
Canada (indirectly able to use your service).

A6. Please provide your contact information for inquiries related to this survey including websites, emails, social media or other methods. \*

Website:

https://www.vlinder.io/ https://www.klefki.io/

LinkedIn:

https://www.linkedin.com/company/14418352/admin/

Email:

malini@vlinder.io info@vlinder.io

A7. Please provide a link to any blog posts which may be available about your company (please include DIACC Spotlights or blog posts as well).

https://diacc.ca/2020/09/03/spotlight-on-vlinder/

# B. ROBUST, SECURE, SCALEABLE

Digital identity solutions must be robust enough to ensure it is secure, available, and accessible at all times. Full time services access also requires redundancy and disaster recovery tools.

B1. Is the organization a member of the DIACC? *
Not a member
Considering Membership
O Board Level
Sustaining
Adopting
B2. Is your model self-attested to be compliant with the Pan-Canadian Trust Framework™ (PCTF)? To learn more about the PCTF, please contact info@diacc.ca *
Yes
O In progress
Undecided
Not planning on it
B3. Does the organization participate in IdentityNORTH Conferences?
Yes
○ No

B4. Where are do you operate Internationally? (check all that apply) *
Canada
✓ US
Mexico, Central America, and Caribbean
Europe
Asia
Africa
Oceania
South America
Additional comments
C. IMPLEMENT, PROTECT, AND ENCHANCE PRIVACY BY DESIGN
C1. Does your product currently in production comply with Privacy laws in the following? *
Canada
Quebec
Brazilian General Data Protection Law (LGPD)
California Privacy Legislation (CCPA)
EU (GDPR)
□ UK
Australia (APPs)

Other

Additional comments	
Our product is broadly compliant with Privacy and w3c standards as well. There may be nuance while implementing for specific situations	es to consider
D. INCLUSIVE, OPEN, AND MEETS BROAD STAKEHOLDER NEEDS	
D1. Which languages does your application support? (check all that apply) *	
English	
Canadian French	
Other	
D2. Which languages do you provide technical support in? (check all that apply) *	
English	
Canadian French	

D3. Does your application design address web content accessibility guidelines and is certified to: *
WCAG (Web Content Accessibility Guidelines)
WCAG 2.0 (ISO/IEC40500)
WCAG 2.1
Been tested to Ontario's AODA compliance
✓ Not Yet
Other
Additional comments

E. PROVIDES CANADIANS CHOICE, CONTROL, AND CONVENIENCE

E1. In addition to Canadian passports and driver's licenses issued by provinces, territories and the Canadian department of defence, does your application currently support. (Note: Canadian citizenship card not added to the list as there are limited security features (e.g., no barcode and not reissued since 2012). The laminated (certificate Indian Status card) does not have a barcode or security features and accordingly, is not recommended for this process). *
Ontario Health card (only to be used for health purposes)
Quebec Health card
Provincial Photo ID cards (Alberta, Manitoba, New Brunswick, Newfoundland, Labrador, Nova Scotia, Ontario, Prince Edward Island, British Columbia, and Saskatchewan)
Canada/US Nexus (Trusted Traveller)
Canadian Permanent Resident card
Secure Indian Status card
In Process
E2. Globally, how many countries or regions can your service assess Passports (for example: 150)  2, more in works
E3. Globally, how many countries or regions can your service assess National ID cards (for example: 100)  2, more in works
E4. Globally, how many total identification records* can your service assess? (Example:
*includes above and other records, 1000)
Millions

E5. Globally, how many countries or regions can your service assess Driver's Licenses (for example, 500) Note: if a jurisdiction has 3 versions of the same Driver's License, please only count it as 1 jurisdiction for this question
Additional comments
F. BUILT ON OPEN STANDARDS-BASED PROTOCOL
Digital identity solutions must be robust enough to ensure it is secure, available, and accessible at all times. Full time services access also requires redundancy and disaster recovery tools.
F1. On which platforms are your solutions available? (check all that apply) *
Apple App store
Google app store
Windows/Microsoft application
Embedded within client's application
In-person scanner - hardware
Not at this time
Other

F2. Please list all Accreditations, Certifications, and Standards that your organization complies with (check all that apply) *
FIDO® Certified
HIPAA - Self-attestation to meet the requirements of Health Insurance Portability and Accountability Act (USA)
ISO/IEC 27001 - an international standard for information security management
ISO/IEC 27018:2019 - Code of practice for protection of personally identifiable information (PII) in public clouds
ISO 30107-3 - Biometric Presentation Attack Detection
NIST 800-63 series - Self-attestation to meet the requirements of NIST Digital Identity guidelines
SOC 2 Type 1 (at point of time) - Service Organization Control
SOC 2 Type 2 (over a 6-month period) - Service Organization Control
Not at this time
Other
F3. Does the solution utilize open standard protocols such as: *
OAUTH2
OPENID CONNECT 1.0
SAML
Not at this time
Additional comments

G1. Confirm if you have an imaging standard for photos and facial capture (check all that apply) *
Passport Image Standard (ISO IEC19794-5)
✓ PNG
✓ JPEG
<b>✓</b> GIF
TIFF
Proprietary standards
Other, please describe
Additional Comments
H. COST EFFECTIVE AND OPEN TO COMPETITIVE MARKET FORCES
H1. What is the cost-model? (check all that apply) *
Flat fee for time period
✓ Pay per use model
Mixed model of flat fee and usage
Other
Additional comments

H2. What size of organizations have adopted your vendor's solution(s)? (check all that apply) *
Government and public sector
Large organizations (Over 500 employees)
Small organizations (Under 500 employees)
Consumer direct
Other
Additional Comments
I. ABLE TO BE INDEPENDENTLY ASSESSED, AUDITED, AND SUBJECT TO ENFORCEMENT
I1. How does the application capture the image of a live person? (check all that apply) *
✓ Via computer webcam picture
Via computer webcam video
Via computer webcam interactive video
✓ Via mobile device picture
Via mobile device video
Via mobile device interactive video
Other

I2. Does the application perform a liveness detection or genuine presence test and how? (check all that apply) *
Yes, actions to be performed by person (active liveness check)
Yes, live video capture and/or motion detection (passive liveness check)
Yes, session can be reviewed by a live human checker
Not at this time
Other
I3. Does the application read the machine-readable portion of the photo identification documents as applicable? *
Yes, recorded and used for validation (the information read from the machine-readable portion is compared to the text on the identity document)
Yes, recorded only without validation
No
I4. Does the application read the facial biometric (ICAO 9303) NFC chip of machine-readable passports? (check all that apply) *
Android ready now
Android ready now Android within next 3 months
Android within next 3 months
Android within next 3 months  Apple ready now
Android within next 3 months  Apple ready now  Apple ready within 3 months

I5. Does the application verify that the chipped ID document has been authenticated? (e.g., Country signer, Active Authentication, etc.)? *
Yes
No
I6. Does the application connect with any government sources to confirm the legitimacy of the record? *
Yes
○ No
I7. Does the application check to confirm the expiry date of the document is not prior to the date of the validation? (As applicable; a requirement from Canadian Anti-Money Laundering regulations) *
Yes
O No
I8. Does the application test the algorithm (if applicable) for the unique identifiers against the ones used by the identification document provider? *
Yes, when applicable (e.g., Ontario Driver's License has the first letter of the identification number matching the first letter of the surname)
○ No

19. Is the application able to parse the following data fields needed for relying parties to use the process for Anti-Money Laundering requirements in Canada? (Note: The fields for AML requirements in Canada as follows: name, address (if on document), date of birth, reference number of identification document, expiry date, date and time of identification validation, type of identification, jurisdiction of identification document, and country of identification document). \*



Yes



No

I10. What physical identification security features does your solution test against a database of expected results? (check all that apply) *
Character spacing
✓ Document size
Document modifications (e.g., cut corner)
Document shape
Font position
Font size
Font type
Holograms
Image frequency
Image positioning
✓ Image size
Markers (logos, symbols or watermarks) positioning
Markers (logos, symbols or watermarks) size
Position and size of magnetic stripe
Raised lettering
Ultraviolet images
Other
Additional Comments

J. MINIMIZES DATA TRANSFER BETWEEN AUTHORITATIVE SOURCES AND WILL NOT CREATE NEW IDENTITY DATABASES

J1. Where is the identification information ultimately stored? (check all that apply) *
By the person being identified (e.g., stored digital identity on their device)
By the vendor on behalf of the subject (e.g., Identity network stores the encrypted access of the digital identity for the person being identified)
By the vendor as directed by the entity receiving the identification information (e.g., financial institution)
By the entity receiving the identification information (e.g., financial institution)
Any of the above
Other
J2. Does the information stay within Canada for the entire session for Canadian issued identification (e.g., in transit not related to storage)? *
Yes
○ No
J3. Does the ID network encrypt all information in the mobile application in transit? *
Yes
○ No

<ul> <li>✓ Major cloud providers with Canadian server locations</li> <li>✓ Major cloud providers with International server locations</li> <li>✓ Private clouds</li> <li>Other</li> <li>J5. What option do they have for the delivery of service? (check all that apply) *</li> </ul>
Private clouds  Other
Other Description of the control of
J5. What option do they have for the delivery of service? (check all that apply) *
J5. What option do they have for the delivery of service? (check all that apply) *
Major cloud providers (SaaS) with Canadian server locations
Major cloud providers with International server locations
✓ Private clouds
On premise with customer's data center
Mobile Integrations (Customer within their own app via SDK)
Mobile Integrations (Vendor application)
Web Integrations (Customer within their own app via SDK)
Web Integrations (Vendor application)
Other
Additional comments

# POINT OF CONTACT INFORMATION

Please provide your contact information. This information will solely be used in the case that DIACC needs to follow up regarding this Directory submission.

Name			
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Email			
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