GROUP 8

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PROJECT CONCEPTUALIZATION

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Canadian Company OSINT Research

Company Name: Binary Stream

Industry: Technology

Age: 20 Years

Type of Business: Enterprise Resource Planning, Independent Software Vendor

Brief Description: Assisting organizations in simplifying their processes with scalable software solutions for ERP. They are a Microsoft Gold Certified ISV, and their software is designed to handle everything from subscription billing automation to property lease management. They advertise improving productivity and enhance business intelligence with their tools and expertise.

"For 20 years, we've been helping organizations like yours simplify their processes with scalable software solutions for ERP. We're proud to be a Microsoft Gold Certified ISV, and our software is built to handle everything from subscription billing automation to property lease management. Discover how you can improve your productivity and enhance your business intelligence with our tools and expertise."
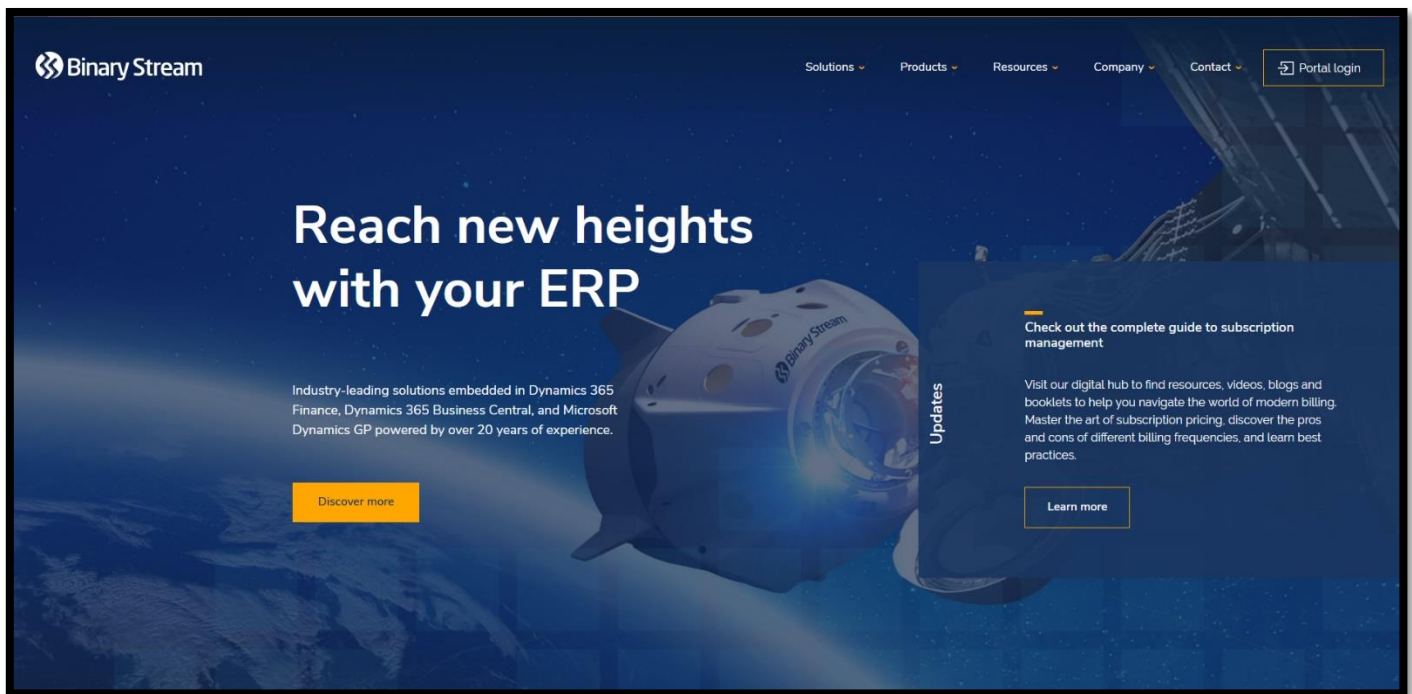(*https://binarystream.com/about-us/*)

IT Infrastructure and Public-Facing Services

➤ Online Store

Binary Stream operates within the digital realm, utilizing a sophisticated WordPress-based web platform as its primary conduit. To engage with their services, prospective clients are required to access a secure portal where they furnish pertinent personal information. Subsequently, this data is meticulously analyzed by proficient sales representatives, enabling them to orchestrate bespoke solutions meticulously aligned with the unique requisites of each corporate entity, thus ensuring an optimal fit for the client.

Themes: Minimalist, Blue, WordPress Based

(https://binarystream.com/)

➤ Public Facing Services

Portal: https://portal.binarystream.com/
Support Page: https://binarystream.freshdesk.com/support/login

➢ IT Infrastructure and Hosting

https://binarystream.com/ information sourced from:
https://builtwith.com/?https%3a%2f%2fbinarystream.com%2f

Analysis and Tracking
1. **Hotjar**
2. **ClickDimensions**
3. **Hubspot**
4. **Google Analytics**

Widgets
1. **WordPress Plugins**
2. **reCAPTCHA**

Content Delivery Network
1. **Cloudflare**
2. **jQuery CDN**
3. **Bootstrap CDN**

Frameworks
1. **PHP7**
2. **ASP.NET**

Content Management System
1. **Wordpress**

JavaScript Libraries and Functions
1. **jQuery**
2. **Google Hosted Libraries**
3. **Core-js, github**
4. **Raven JS**

Email Hosting Providers
1. SendinBlue
2. Amazon SES
3. Microsoft Exchange
4. SPF
5. Microsoft Azure
6. Office 365

Name Server
Type: A
Name: binarystream.com/
TTL:1800
Address: 13.66.138.106
Owner: Microsoft Corporation
WHOIS AS8075
Owner: Tiggee LLC
Type: NS
Name: binarystream.com/
TTL: 21600
Canonical Name: ns1.dnsmadeeasy.com. (208.80.124.2Check IP Blacklist)
WHOIS AS16552

SSL Certificates
1. SSL By Default
2. GoDaddy SSL

Web Hosting Providers:
1. Microsoft Azure

Web Servers:
1. IIS
2. IIS 10
3. LiteSpeed

Canadian Cybersecurity Regulations and Laws

- **Personal Information Protection and Electronic Documents Act (PIPEDA):**

  - PIPEDA is Canada's federal privacy law that governs the collection, use, and disclosure of personal information by private-sector organizations. It includes provisions related to data security and breach notification requirements.

- **Digital Privacy Act:**

  - The Digital Privacy Act amended PIPEDA to introduce mandatory breach reporting and notification requirements. Organizations are required to report data breaches to the Privacy Commissioner of Canada and affected individuals.

- **Canada's Anti-Spam Legislation (CASL):**

  - CASL is a law aimed at reducing spam, but it also includes provisions related to the installation of computer programs and the collection of electronic addresses. Compliance with CASL is essential for email marketing and electronic communication.

- **Personal Health Information Protection Act (PHIPA):**

  - PHIPA is an Ontario-specific regulation that governs the protection of personal health information held by health care providers. Similar regulations exist in other provinces and territories.

- **Financial Institutions Regulatory Regime (FIRR):**

  - FIRR includes cybersecurity requirements for financial institutions in Canada. It is administered by the Office of the Superintendent of Financial Institutions (OSFI).

- **Canadian Radio-television and Telecommunications Commission (CRTC) Regulations:**

  - CRTC regulations include requirements for telecommunications service providers to protect customer information and privacy.

- **National Institute of Standards and Technology (NIST) Cybersecurity Framework:**

  - While not a law or regulation, the NIST Cybersecurity Framework is widely used in Canada as a guideline for enhancing cybersecurity. It provides best practices for organizations to manage and reduce cybersecurity risks.

- **Government of Canada's Secure Remote Access (SRA) Guidelines:**

  - These guidelines are applicable to federal government departments and provide security requirements for remote access to government systems.

Technical Specification to Meet Business and Regulatory Requirements

In conclusion, Binary Stream, a well-established technology company, distinguishes itself through a comprehensive array of cutting-edge products and services designed to meet the evolving needs of businesses in today's digital landscape. As an Independent Software Vendor (ISV) specializing in Enterprise Resource Planning (ERP) solutions, Binary Stream assists organizations in optimizing their processes through innovative and scalable software tools. It is paramount for Binary Stream to remain fully compliant with an array of Canadian cybersecurity regulations and laws, including PIPEDA, the Digital Privacy Act, CASL, PHIPA, FIRR, CRTC Regulations, NIST Cybersecurity Framework, and Government of Canada's SRA Guidelines. To meet these stringent requirements, Binary Stream relies on a comprehensive suite of cybersecurity software and solutions. These include encryption and data protection tools, breach detection and reporting systems, email compliance and security measures, healthcare and financial data protection solutions, and network security measures. By diligently implementing these software solutions, Binary Stream not only adheres to legal obligations but also maintains a strong commitment to safeguarding sensitive information, ensuring the trust and security of their clients and partners.

1. **Data Encryption and Protection:**

   o **Encryption Software:** Implement encryption software for data at rest and in transit to ensure that sensitive information is protected from unauthorized access.
   o **Data Loss Prevention (DLP) Software:** DLP solutions help monitor and protect sensitive data, preventing unauthorized sharing or leakage.

2. **Breach Detection and Reporting:**
   o **Security Information and Event Management (SIEM) System:** SIEM solutions can monitor network and system activities for suspicious behavior and generate alerts for potential breaches.
   o **Incident Response Software:** Implement incident response software to streamline the process of identifying, reporting, and mitigating data breaches.

3. **Email Compliance and Security:**
   o **Email Security Gateway:** Use an email security gateway to protect against spam, malware, and phishing attacks, ensuring compliance with CASL.
   o **Email Encryption Software:** Encrypt email communications containing sensitive data to comply with PIPEDA and ensure the security of personal information.

4. **Healthcare Data Protection (PHIPA Compliance):**
   o **Electronic Health Record (EHR) System:** If applicable, use an EHR system that complies with PHIPA for managing and protecting personal health information.

5. **Financial Data Security (FIRR Compliance):**
   - **Financial Software Solutions:** Implement financial software and security measures to meet the cybersecurity requirements specified by FIRR.

6. **Telecommunications Security (CRTC Compliance):**
   - **Firewall and Intrusion Detection System (IDS/IPS):** Use firewall and IDS/IPS solutions to protect customer information and comply with CRTC regulations for telecommunications providers.

7. **Cybersecurity Best Practices (NIST Cybersecurity Framework):**
   - **Security Information and Event Management (SIEM) System:** SIEM solutions can help organizations align with NIST cybersecurity best practices by providing real-time monitoring and threat detection.
   - **Vulnerability Assessment Tools:** Regularly scan and assess vulnerabilities in systems and applications using vulnerability assessment tools.
   - **Patch Management Software:** Implement a patch management system to promptly apply security patches and updates.
   - **Endpoint Detection and Response (EDR):** EDR solutions help detect and respond to cybersecurity threats on endpoints.

8. **Secure Remote Access (Government of Canada's SRA Guidelines):**
   - **Virtual Private Network (VPN):** Implement VPN technology to provide secure remote access to systems and data, following SRA guidelines.

9. **User Authentication and Access Control:**
   - **Identity and Access Management (IAM) System:** IAM systems help manage user identities, access rights, and enforce least privilege principles to enhance security.

10. **Security Awareness Training:**
    - **Security Awareness Training Platforms:** Use training platforms to educate employees on cybersecurity best practices and compliance requirements.

11. **Documented Policies and Procedures:**
    - **Policy and Procedure Management Software:** Utilize software to document, manage, and enforce cybersecurity policies and procedures as required by various regulations and guidelines.

12. **Compliance Reporting:**
   - ○ **Compliance Management Software:** Implement compliance management software to track and report on adherence to regulatory requirements.