

Datasheet

Biometrics-as-a-Service – powered by ImageWare® Systems GoVerifyID®

True Identity Assurance is a fundamental requirement of any robust security environment. Security is not just about having the best locks in the world, it's also about knowing who has the keys and ensuring that they are the only people who can use them.

The Biometrics-as-a-Service solution is a massively scalable, globally available solution that will quickly assist organizations with determining a true identity in the first instance, via identification, or verify against a known identity, (i.e. authentication). With over 20 years' experience in Biometrics, Fujitsu has the capability and solutions to assist customers to understand and solve their Biometric needs. Having experience in virtually all Biometric and Identity domains, Fujitsu can demonstrate how the Biometrics-as-a-Service solution can quickly deliver Identity Assurance, i.e. complete trust in "who" is using the system, in each specific problem space.

Challenges

There are many areas where identity assurance is important in today's enterprise:

Staff

- Physical access to buildings
- Login access to systems, either Single Sign-On or specific functions within applications
- Access and Audit controls for high value items
- Staff ID cards
- Time and Attendance
- Help Desk applications

Customers

- eCommerce (online)/mCommerce (mobile devices) solutions
- Cashless Point of Sale solutions
- Secure Patient eHealth records
- Help Desk applications

As Biometric systems become ever more connected to the business applications they support, a greater proportion of complexity is found in the integration of Biometric and non-Biometric components. Many legacy systems store disparate identity information – the Biometrics-as-a-Service solution can be leveraged to tie it all together across geographic regions.

With the vast array of Biometric solutions available today, customers are not only looking for answers about "if" they can leverage Biometrics but which types of Biometrics are best suited to their business needs and risk levels. The Biometrics-as-a-Service solution is capable of supporting multiple Biometric modalities, or Biometric types, across multiple access channels in any region of the world. In addition to traditional Biometrics the system can utilize non-traditional Biometrics, e.g. vascular, and Advanced Pattern Matching (APM) systems to increase security.

How we can help

Fujitsu has developed and deployed Biometric products and systems for over two decades--from consumer-focused devices such as fingerprint readers in laptops; through large scale financial service solutions, including cardless ATM's and cashless payment solutions; up to national-scale border management and healthcare systems.

The problem

- Identity theft costs US Health Care companies billions of dollars annually.
- Organizations around the world lose an estimated five percent of their annual revenues to fraud
- Account resets are the most common help desk call due to forgotten passwords adding unnecessary cost to all Help Desk work
- Many systems are unable to leverage "step up" authentication--to leverage higher levels of trust for high risk transactions
- Most organizations don't have the infrastructure or experience to be able to deploy large scale Biometric solutions quickly and securely.
- Passwords are antiquated, difficult to manage, and too often compromised before or utilized during a breach.
- Passwords are also extracted and stolen in bulk during many breaches. Your users regularly reuse passwords across multiple platforms and sites across the Internet exposing your systems to potential compromise due to another organization's security breach.
- Case in point, the breach of a major social networking community in 2013 released 50 million user names and passwords into the underground where they were decrypted and leveraged in massive user account takeover campaigns across hundreds of online retailers. This resulted in over \$10 million in fraud, lost product, chargebacks and brand reputation damage for just one online retailer.

In addition, Fujitsu is a contributing member on both national and international Biometrics standards committees.

As such, Fujitsu has been able to partner with best-of-breed partners to leverage world leading cloud providers, including Fujitsu K5® cloud services, to deploy a truly global, scalable Biometrics-as-a-Service offering. Utilizing the Fujitsu K5 cloud with Fujitsu Enterprise Service Catalog Manager, a completely new Biometric solution, capable of matching millions of records, can be deployed and integrated into existing systems in days, not weeks or months.

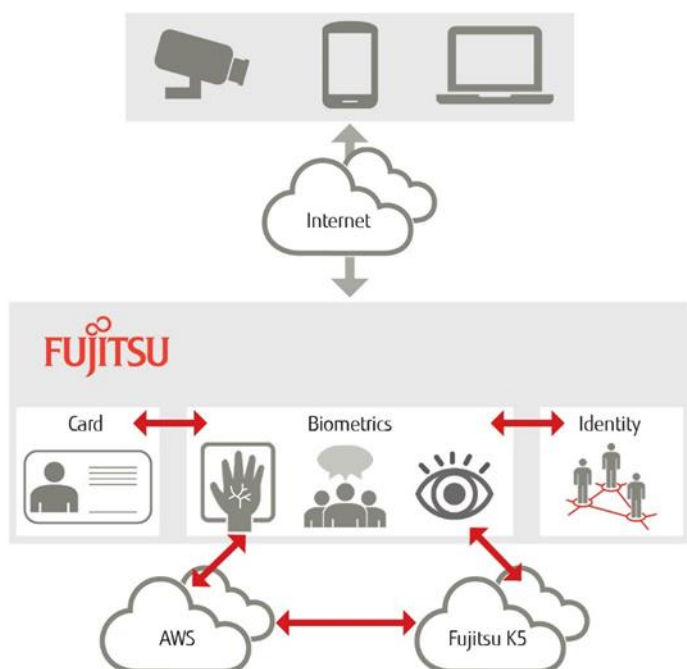
Benefits

Fujitsu combines a deep understanding of Biometrics with our world leading cloud infrastructure, allowing anything from corporate solutions to national and international Biometric capabilities to be deployed quickly and securely.

The ability of the system to process and match multiple Biometric types, including Advanced Pattern Matching, means that you can tailor the risk and security levels for each user group within the application, while maintaining a single source of truth for identities. This means you have assurance it's the same person accessing different systems under the same credentials.

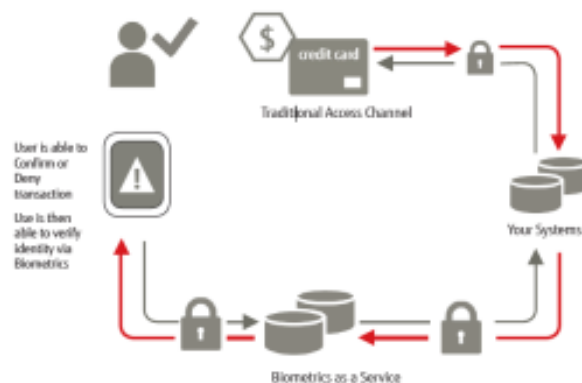
The use of a centralized architecture for the solution means that new Biometrics can be checked against existing Biometrics to reduce fraud, something that isn't possible with Match-on-Device, i.e. Match on Smartphone, style solutions.

Utilizing a cloud based model, the solution can be developed for large scale solutions; however, during the trial or startup phase you only pay for the size of the system that you are currently using.



What we offer

- **Cloud based Biometrics-as-a-Service (BIOaaS) solution** – the Fujitsu multi-modal Biometrics-as-a-Service solution is a massively scalable secure solution that is capable of running in a variety of ways.
 - **Complete Identity Management as a Service**
Securely stores all Biometric and Biographic information in the cloud
 - **Anonymous Biometrics-as-a-Service**
No Personally Identifiable Information (PII) leaves the organization
 - **Anonymous Biometrics matching service**
All information is stored in house and only the Biometric templates being matched are sent to the cloud
- **Mobile Device capabilities** -- Why restrict Identity Security to the desktop? The BIOaaS solution is capable of using and matching against Biometrics collected via traditional means as well as utilizing the existing capabilities of today's smart phones and tablets. This gives enterprises the ability to quickly and easily extend any corporate or customer identification scheme to:
 - **In Band Mobile verification**
Require users to use Biometrics to verify their identity to log in to access **certain** functions in an application on a phone or tablet
 - **Out of Band Mobile verification**
"Out of Band" means using a different communication or "access channel" to verify the **customers'** identity. With the use of Secure Push notification, a user can be verified, via their registered mobile device, "out of band" of traditional transactions, i.e. in person or online transactions. This means that all types of customer interaction can be secured to the same trust level, avoiding Channel shift of Fraud to less secure access channels.



Various Applications and Domains out of the Box -- BIOaaS can secure and simplify the User Authentication Process across a number of use cases:

IT Security and the Enterprise

- Replace higher cost token based authentication
- Application Access
- Mobile Device, Application and Data Security
- Corporate Resource Access
- Password Reset Request Verification
- Biometric Identification as part of an Identity Management Solution

Banking and Financial

- Log into a mobile banking app
- Log into an online banking website using a PC
- Out of Band Authorization for charges/payments

Retail

- Log into an online store via a web page
- Log into a mobile store via a mobile device
- Verify a purchase from a web-based store
- Verify a purchase from a mobile store
- Verify a purchase made in a physical store
- Loyalty programs and marketing messages

Healthcare and Insurance

- Protect patient records
- Sharing patient records
- Electronic prescriptions (e-Rx) for control
- Patient check-in
- In-home care providers access
- Remote access to clinical portals and applications
- Access to patient portals
- Access to mobile health applications

Education

- Protect student records
- Verify test takers
- Verify a purchase from a mobile store
- Verify a purchase made in a physical store
- Point-of-Sale integration
- Protect network and system resources

In addition, to assist with any complex or large scale solutions Fujitsu also offers:

- Consulting -- Fujitsu offers a range of consulting capabilities – from short duration “health checks” to in-depth reviews
 - Biometrics Health Check
 - Product Evaluation
 - System Performance Evaluation
 - Biometric modality or solution selection
 - Architectural Assistance for complex Biometric and Identity solutions
- Systems Integration -- As one of the world’s largest Systems Integrators, Fujitsu has the skills and experience to assist with all of your Biometrics system integration needs.
 - Proven Biometric experience in multiple domains and regions
 - On Shore, Near Shore and Offshore Development capability

How it works

What is the Biometrics-as-a-Service solution?

The Biometrics-as-a-Service solution is a flexible and scalable biometrics engine running in a globally available cloud platform, that supports multiple Biometric types out of the box. The vendor agnostic architecture ensures that a facial image, voice or fingerprint captured via a smart phone, tablet, laptop or Enterprise capture solution will all match in the cloud the same way.

The IWS Biometrics Engine® is capable of matching a large array of Biometric types, with new Biometrics being added as they are developed. The system is capable of running from small scale commercial systems to massive national or international deployments.

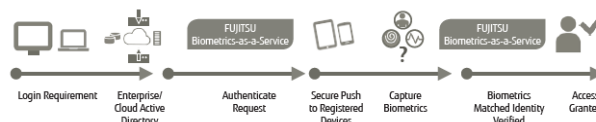
As an example of how it works with Active Directory, when a user tries to access a corporate or protected application, this request is captured by the Active Directory and sent out to the Biometrics engine. The Biometrics engine sends an authentication request (the type and number of Biometrics required can be managed based on risk) to the user’s registered device via a secure message format. The user must pass the required Biometrics checks before the system will allow access.

In addition to existing integration to Microsoft® Office 365™, Active Directory, CA, Aruba, IBM® ISAM, SAP® solutions, the Biometrics engine is flexible enough to be integrated into existing corporate applications via Web Services and SAML.

Why Fujitsu

Fujitsu provides a full array of Biometrics consulting, products and solutions in addition to our BIOaaS offering. The Biometrics-as-a-Service solution allows for massively scaled Biometric solutions to be deployed quickly and easily, yet have a global reach. The solution is able to deliver a complete identity management solution as a service, reducing capital expense and accelerating the Return-on-Investment from years or months to weeks or days. Fujitsu is your trusted partner for Biometric services. We are arguably the most global vendor, with leadership market share in Europe, Asia and North America. With more than 155,000 employees worldwide in over 100 countries speaking 29 languages, we can service your infrastructure in place, with a two-hour response, to cities throughout the world. Fujitsu can deliver unique value to global clients by helping them standardize global delivery, operations and support. At the same time, we have the local presence and understanding to do business with clients who have regionally diverse languages and cultures. Fujitsu leverages best-of-breed infrastructure solutions to reduce risk, complexity and

cost.



More information

Fujitsu products, solutions & services

Products

www.fujitsu.com/global/products/

In addition to the Fujitsu [Product name], Fujitsu offers a full portfolio of other computing products.

Computing products

- Storage systems: ETERNUS
- Server: PRIMERGY, PRIMEQUEST, Fujitsu SPARC M10, BS2000/OSD Mainframe
- Client Computing Devices: LIFEBOOK, STYLISTIC, ESPRIMO, FUTRO, CELSIUS
- Peripherals: Fujitsu Displays, Accessories
- Software
- Network

Product Support Services with different service levels agreements are recommended to safeguard each product and ensure smooth IT operation.

Solutions

<http://www.fujitsu.com/global/solutions>

The Fujitsu solutions combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships. Fujitsu's Solutions include parts of one or more activity groups (e.g., planning, implementation, support, management, and training services) and are designed to solve a specific business need.

Infrastructure Solutions are customer offerings created by bringing Fujitsu's best products, services and technologies together with those from partners to deliver benefit to our customers' businesses.

Industry Solutions are tailored to meet the needs of specific verticals.

Business and Technology Solutions provide a variety of technologies developed to tackle specific business issues such as security and sustainability, across many verticals.

Services

www.fujitsu.com/global/services/

Several customizable Fujitsu Service offerings ensure that IT makes a real difference and delivers true business value. We do this by leveraging our extensive experience in managing large, complex, transformational IT programs to help clients in planning, delivering and operating IT services in a challenging and changing business environment.

Application Services support the development, integration, testing, deployment and on-going management of both custom developed and packaged applications. The services focus on delivering business and productivity improvements for organizations. Business Services respond to the challenge of planning, delivering and operating IT in a complex and changing IT environment. Managed Infrastructure Services enable customers to deliver the optimal IT environment to meet their needs – achieving high levels of IT service quality and performance for data center and end user environments.

Fujitsu green policy innovation

www.fujitsu.com/global/about/environment/
Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at:



More information

Learn more about Fujitsu, please contact your Fujitsu sales representative, Fujitsu business partner, or visit our website.
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