



SignatureOnline[®]
Real-time, Dynamic Signature Verification



Parascript® *SignatureOnline*®

Parascript helps organizations fight check and signature fraud with *SignatureOnline*®, which verifies and detects signature discrepancies through online applications. By incorporating multiple verifiers and multiple reference signatures, the technology delivers an increased level of security for users.

Awarded best performance for online signature verification.*

Real or counterfeit? Verify signatures online in real time with complete confidence.

SignatureOnline provides signature verification to detect signature fraud in a variety of online applications, such as workflow automation, document management, and electronic transactions in banking, financial, health care, retail, government, and other sectors. *SignatureOnline* detects and saves the movement of a pen and recognizes the differences in legitimate signing style or behavior to quickly and reliably detect fraud with a high degree of accuracy.

Automatic Verification of Signature Trajectory.

SignatureOnline combines the analysis of spatial characteristics as well as the behavioral biometrics of a handwritten signature. This revolutionary approach was developed using the most comprehensive and advanced technological methods available:

- **Multiple verifiers** - *SignatureOnline* applies a powerful combination of multiple proprietary verifiers and different fundamental approaches and principles to increase verification accuracy.
- **Multiple Reference Signatures** - *SignatureOnline* verifies a presented signature against multiple reference signatures to determine random deviations in a person's handwritten signature for enhanced verification quality.

Product Benefits

- **Improved Profit Margins & Higher Customer Satisfaction** - *SignatureOnline* offers the industry's highest accuracy and reliability and provides accurate, real-time fraud

detection capabilities. With *SignatureOnline*, organizations are now able to prevent and combat costly fraud losses and thereby reduce expenses associated with identity theft resulting in improved profit margins and higher customer satisfaction.

- **Multiple Methods of Verification** - *SignatureOnline* combines multiple proprietary verifiers based on different technological approaches. These verifiers analyze the shape, speed, stroke, pen pressure and timing information received during the act of signing. Each of these verifiers produces its own individual analysis and the final result is based on the combination of these individual analyses to ensure a high verification accuracy.
- **Analysis of Behavioral Biometrics** - *SignatureOnline* analyzes handwritten signatures and detects random and skilled forgery through behavioral biometrics. This feature ensures that forgery is detected even when the forger has a copy of the authentic signature.
- **Multiple Reference Signatures** - For added protection, *SignatureOnline* compares signatures being verified against multiple reference signatures, if available. This reduces the number of false positives by taking into consideration random deviations inherent to human handwriting.
- **Confidence Value** - Assigning confidence values provide users with the ability to execute different scenarios of interpreting the results. The confidence value indicates how certain the verification process is about the match between the signature presented for verification and the corresponding reference signature. Depending on the confidence value chosen as a threshold, it is possible to change the percentage of “false accepts” and “false rejects” to tailor it to a specific application.
- **Universal Algorithms of Signature Analysis** - *SignatureOnline* helps system integrators accelerate their time-to-market with easy-to-use software. The software is ready-to-use and does not require additional training. *SignatureOnline* provides language-independent solution and easily integrates into any application that requires an engine for online signature verification.

Technical Product Specifications

System Structure

- **Recognition engines:** organized as Dynamic Link Libraries (DLLs), the engines communicate through the Application Programming Interface (API)
- Data files
- Signature Trajectory Editor

Components and File Sizes

- **Dynamic Link Libraries:** 288 KB
- **Data Files:** 80.5 KB

Requirements

- **Platforms:** Windows® 7 Professional, Windows® XP Professional, Windows® 2003 Server
- **CPU:** Pentium III, 500 MHz minimum required
- **RAM:** 512 MB minimum required
- **Hard Disk Space:** 2 MB

Input

- *SignatureOnline* support pen trajectory of a signature
- Any capacity or membrane based tablet or a touchpad with signature capture capability

Output

- Confidence value

License Protection

- Softlock

SignatureOnline is just one of the many solutions within Parascript's product suite. For more information, visit our website at parascript.com or call us at 888.225.0169.

**SignatureOnline* was awarded best performance for online signature verification at the tenth International Conference on Document Analysis and Recognition (ICDAR) in Barcelona, Spain, in July 2009.



parascript.com

6273 Monarch Park Place, Longmont, CO 80503 USA
T: 303.381.3100 | toll free: 888.772.7478
F: 303.381.3101 | info@parascript.com

©2013 Parascript, LLC. All rights reserved.
Parascript and *SignatureOnline* are registered trademarks of Parascript.