In March of 2018 the Department of Homeland Security Science and Technology Directorate Sponsored the Biometric Technology Rally. The testing took place at the Maryland Test Facility (MdTF).

This rally measured the ability of autonomous biometric processes to meet the needs of high throughput operations in a space of just 7 ft. x 8 ft. Each system was required to match individuals one at a time and generate up to 3 images.

Twelve participants were selected to create a solution to be tested in the rally including Thales. The Thales Cogent Face Recognition Platform (FRP) was used as the core technology to meet the biometric rally requirements and metrics. The solution measured sufficiently above the desired range or higher for each variable for which it was tested.

99.44% successful acquisition rate in less than 5 seconds vs. average of 68%

96% of volunteers were “Happy” or “Very Happy” with their experience with Thales Cogent Face Recognition Platform.
2018 Biometric Technology Rally definitions and results

The Thales solution utilizing live facial recognition performed exceptionally well at the rally. Here is a summary of its performance compared to the average execution of all competitors.

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Gemal to Cogent LFIS</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>The average time in seconds volunteers spent between entry and exit beams.</td>
<td>5.5</td>
<td>6.88</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>The percentage of “Happy” or “Very Happy” ratings provided by volunteers after using the system.</td>
<td>96%</td>
<td>90%</td>
</tr>
<tr>
<td>Face FIAR (under 5 seconds)</td>
<td>Failure to acquire rate: the percentage of transactions that failed to acquire or process a face within 5 seconds after the entry beam.</td>
<td>.6%</td>
<td>32%</td>
</tr>
<tr>
<td>Face vTIR (under 5 seconds)</td>
<td>Vendor true identification rate: the percentage of transactions providing correct station-reported identity within 5 seconds after the entry beam.</td>
<td>98%</td>
<td>66%</td>
</tr>
<tr>
<td>Face mTIR (under 5 seconds)</td>
<td>MdTF true identification rate: the percentage of transactions providing correct identity after the entry beam break within 5 seconds as calculated by the MdTF face matching engine.</td>
<td>98%</td>
<td>65%</td>
</tr>
</tbody>
</table>

Identity Verification

The Thales Cogent Face Recognition Platform (FRP) helps you improve security and efficiency where you need it most.

FRP is on-the-move facial recognition, letting customers easily achieve a high throughput with minimal agent intervention. Identifying subjects is quick and easy with real-time face matching and capture. Identity verification can be coupled with document authentication to create a strong foundation.

Using 1:1, 1:n or several-to-many comparison, FRP achieves a greater accuracy of matches and has the capability to verify up to 32 people at a time.

FRP’s minimal footprint is ideal for integration into most applications and is easily scalable to accommodate expanding needs.

Does not constitute an endorsement or guarantee by the U.S. Government. This information was determined based on evaluation by the Maryland Test Facility (an entity of the Department of Homeland Security Science and Technology Directorate) as part of a Biometric Rally held in March 2018 under a Limited Purpose CRADA.

Thales can help improve the traveler journey while maintaining security and efficiency.

Learn more at https://www.thalesgroup.com/biometric-traveler-journey