MIMOS Self-Monitoring Analytics Reporting Technology (SMART) Lock-Up
Monitoring detainees such as in police lock-ups often rely on manual detection of events and results in post-event action. Such safety levels within lock-ups risk the well-being of detainees. MIMOS SMART Lock-up utilises video analytics to automatically detect and issue alerts. These are done on suspicious or violation activities in the lock-up cells and the perimeter of the lock-up during day and night.

Features
MIMOS SMART Lock-Up comprises intelligent video analytics as well as complementary management features:

- **Cell-Based Video Analytics**
  b. Loitering in Toilet Area Detection – detects object presence in a toilet for a fixed long duration.
  c. Aggression Detection – detects fast movement or aggressive activity in a cell such as pushing and punching.
  d. Tampering Detection – detects any attempt to move or distort a camera's position or view.

- **Perimeter-Based Video Analytics**
  a. Restricted Region Detection – detects an object’s presence at a location with limited access.
  b. In/Out Detection – detects ins and outs of an object's movement in any location of a lock-up.
  c. Crowd Density Detection – detects the presence of high people occupancy.

- **Event Metadata Display and Management**
  Event metadata is displayed and managed by a Smart Client or by third party clients (event metadata is accessible through provided socket connection libraries and HTTP POST (JSON)).

- **Smart Client (for large lock-ups)**
  Smart client comprises:
  a. Real-time camera view for live monitoring
  b. Real-time event alerts (video and audio)
  c. Location-based 3D event indicator
  d. Historical event analysis

Technology Benefits
The main impacts of MIMOS SMART Lock-Up are:

- **Patented Algorithms and Technology**
  MIMOS’ in-house algorithms provide high accuracy and low false alarm rates.

- **Real-Time Monitoring and Offline Event Detection**
  MIMOS SMART Lock-up can be applied in automated real-time video monitoring and offline forensics event detection.

- **Increased Operational Efficiency**
  Video monitoring and analysis potentially increases daily work efficiency by providing situational awareness to users through various event fusion and analysis.

- **Uncompromised Quality with Reduced Cost**
  Security personnel can efficiently run the grounds without the need for stationary personnel to watch surveillance monitors.

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**Technology Summary**
MIMOS SMART Lock-Up
A versatile video surveillance solution for lock-up environments.
- **Industries:** Enterprise, Government, Public Safety
- **Features**
  - Cell-based video analytics
  - Perimeter-based video analytics
  - Event metadata display and management
  - Smart Client (for large lock-ups)

**Technology Benefits**
- Patented algorithms and technology
- Real-time monitoring and offline event detection
- Increased operational efficiency
- Uncompromised quality with reduced cost

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**System Requirements**

<table>
<thead>
<tr>
<th>MIMOS SMART Lock-Up</th>
<th>Configuration Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resolution</strong></td>
<td>352 x 288 (CIF)</td>
</tr>
<tr>
<td><strong>Frame/Second</strong></td>
<td>10fps (office, foot walk), 15fps (vehicle, sports, fast movement)</td>
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<table>
<thead>
<tr>
<th>MIMOS SMART Lock-Up</th>
<th>Hardware Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Server Machine</strong></td>
<td>Processor: Intel 8® Core i7-7567U CPU @ 3.50 GHz (2 cores) Memory: Min. 4GB Disk Storage: Min. 1TB Supports 6 cameras*</td>
</tr>
<tr>
<td><strong>Network</strong></td>
<td>Processor: Intel 8® Xeon 8® CPU E5-2630 @ 2.3GHz (12 cores) Memory: Min. 24GB Disk Storage: Min. 1TB Supports 36 cameras*</td>
</tr>
<tr>
<td><strong>Client Machine</strong></td>
<td>Processor: Intel 8® Core i5-7200U CPU @ 2.50 GHz (2 cores) Memory: Min. 4GB Disk Storage: Min. 256GB Supports each Smart Client, separately. Able to support 42 camera views display.</td>
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<thead>
<tr>
<th>MIMOS SMART Lock-Up</th>
<th>Software Requirements</th>
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</thead>
<tbody>
<tr>
<td><strong>Operating System</strong></td>
<td>Windows 7/8/10, Windows 7/8, Server 2012 and above</td>
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<tr>
<td><strong>.NET Framework</strong></td>
<td>Microsoft .NET 4.5 and above</td>
</tr>
<tr>
<td><strong>Database</strong></td>
<td>SQL Server 2012</td>
</tr>
</tbody>
</table>

* Each cell-based camera is supported by three video analytics features.