



Powered by WareLite BOSS

**Real Time, Integrated Management of Artworks
Safety & Security**

© 2007 WareLite Ltd



- JeriTech Ltd is a UK based ISV founded in February 2007 by a Management Team including WareLite Ltd Directors and Experts in the Safety & Security of Artworks
- JeriTech offers Real Time, Integrated Safety & Security solutions based on WareLite Event Driven Application Platform, WL BOSS (www.warelite.net) and supported by Motorola (Symbol) Enterprise Class Mobile Momputers
- JeriTech market is Art Galleries, Museums and Art Auction Houses



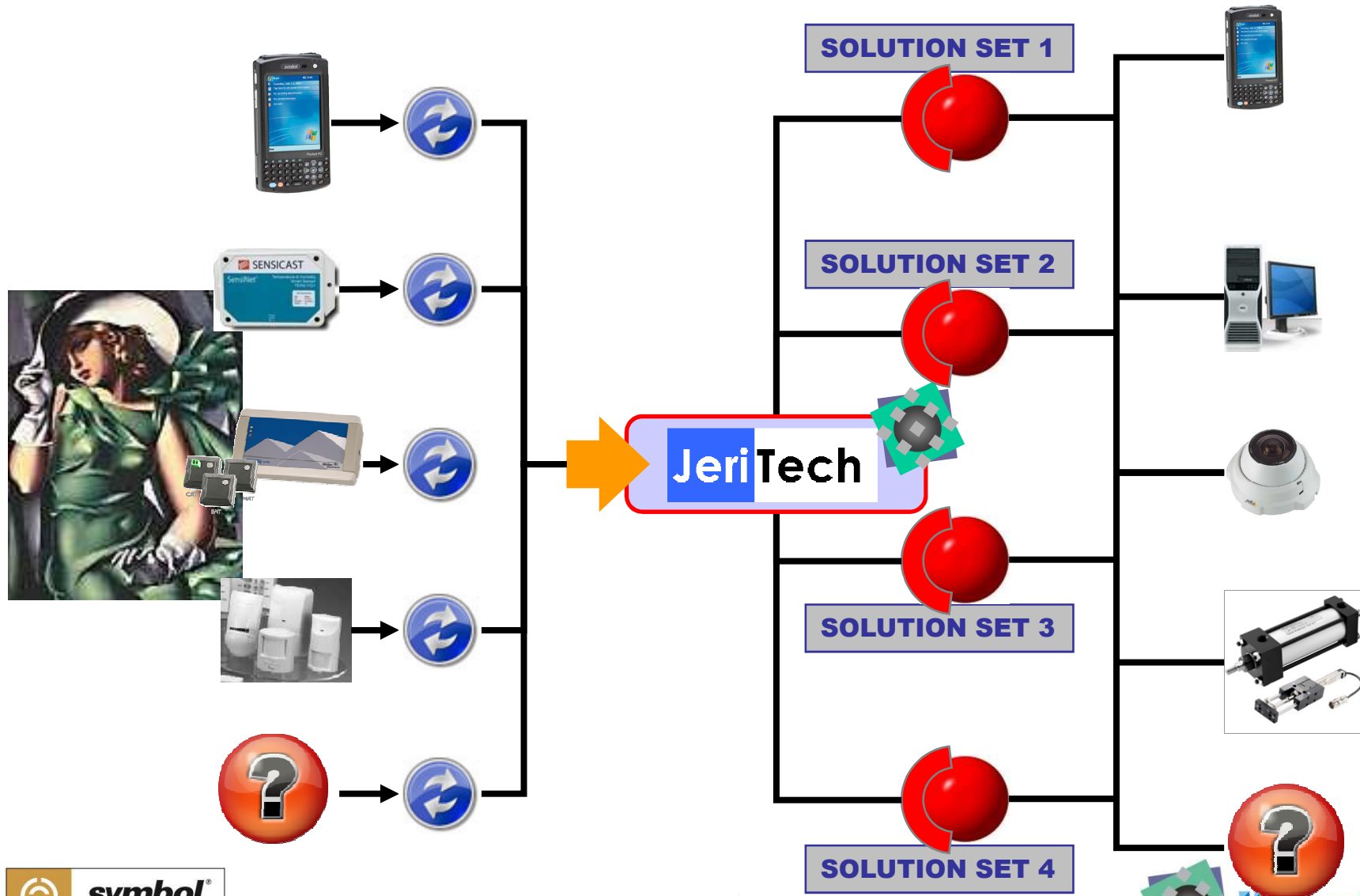
- The management of an art work's lifecycle – from its delivery to the monitoring of its security and environmental safety – still depends upon fundamentally manual activities
- In fact, though new wireless sensor networks can monitor a variety of parameters with ever greater precision and resolution, such connectivity and granularity are not matched by current software tools' capabilities, as they suffer from two main limitations:
 - *Current safety and security software applications have been developed with a 'silos' approach, i.e. each single type of sensor is managed vertically and separately from all others. Correlating the various parameters monitored – each available via a separate interface - is the user's responsibility*
 - *They do not provide automated reactivity to anomalies – it is the user's responsibility to observe parameter's variations and decide upon the appropriate course of action*

The value of sensor data is in their immediacy and accuracy: current software tools introduce latency and imprecision in the reactivity to the variation of monitored parameters – with costs that increase linearly with the value of the artworks' exhibited

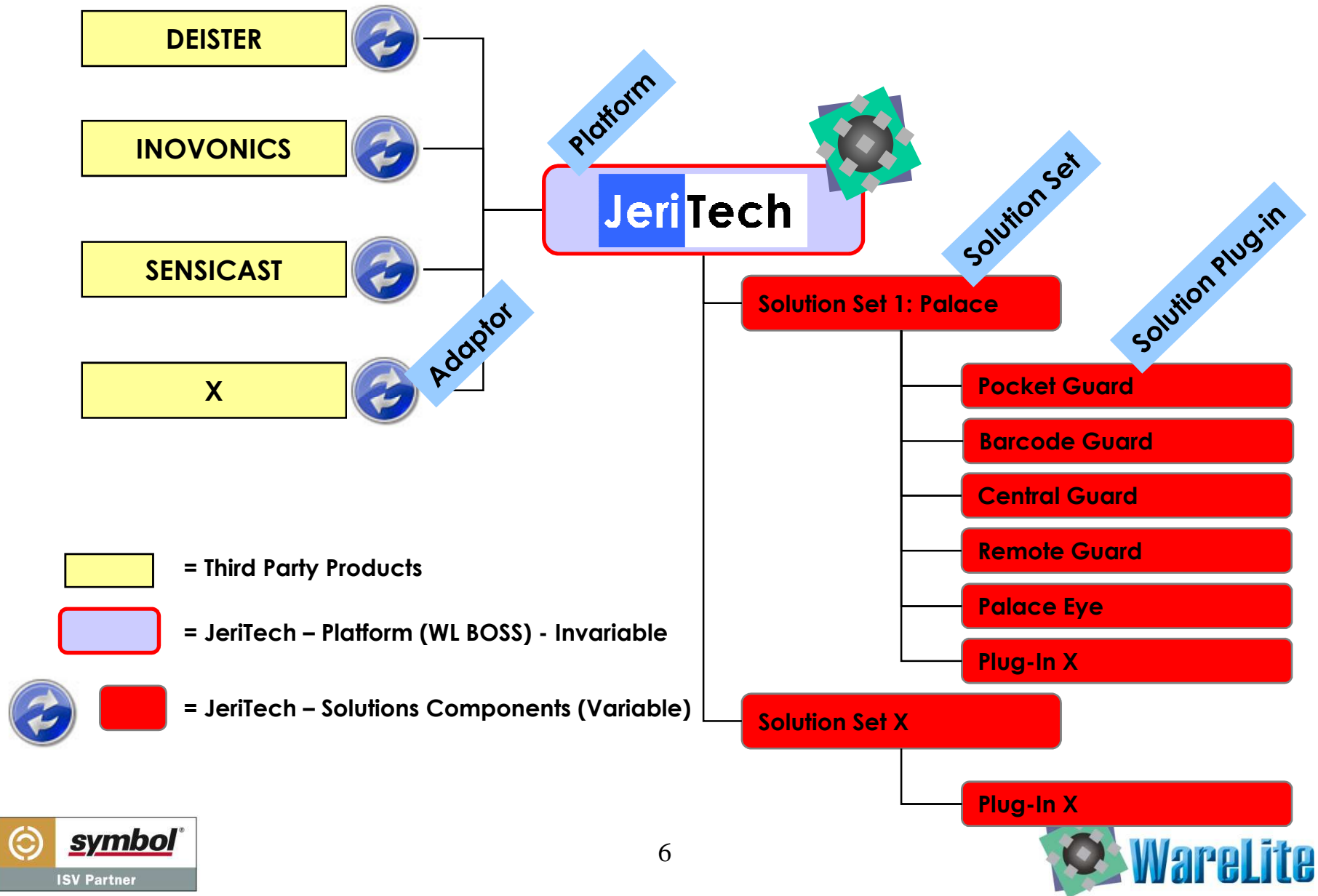
- **THE OBJECTIVE:** To react immediately and precisely to variations in the parameters measuring artworks' safety & security, i.e. to manage an artwork's lifecycle with the maximum degree of automation
- **HOW TO ACHIEVE IT:** With a unified vision over the entire wireless sensors network, where correlations between monitored parameters are automatically analysed and each anomaly immediately triggers an automated reaction, localised where needed. Such reaction can be the activation of an external tool (e.g. CCTV) and/or the sending of alert messages over pervasive supports such as Pocket PCs (e.g. Symbol MC50). These – thanks to their many functionalities, including barcode reading and printing – are used to automate the management of the entire artwork's lifecycle
- **BENEFITS:** Increase in the safety & security of artworks and reduction of operational costs

JeriTech: Real Time, Integrated Management of Art Exhibitions

JeriTech

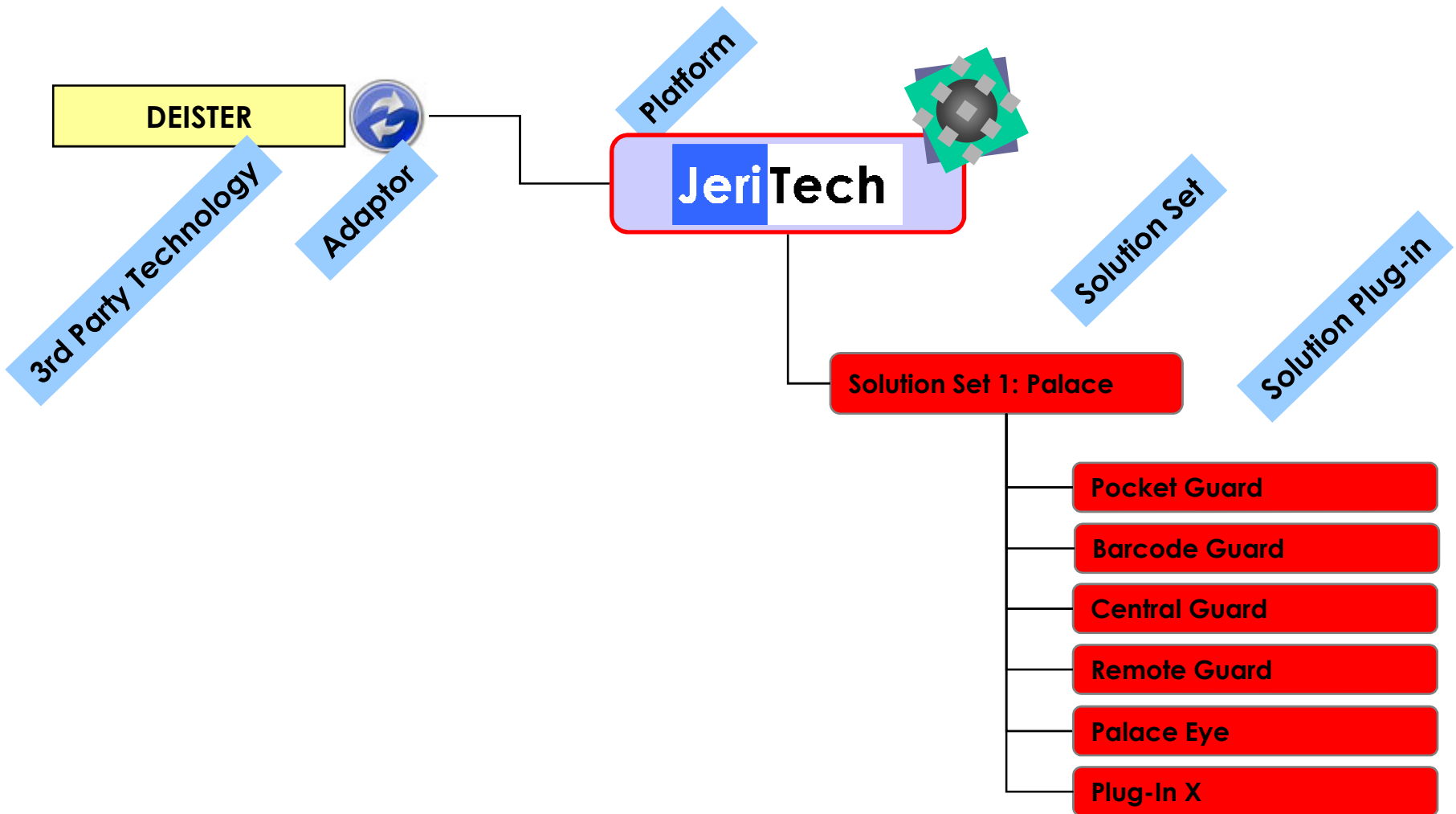


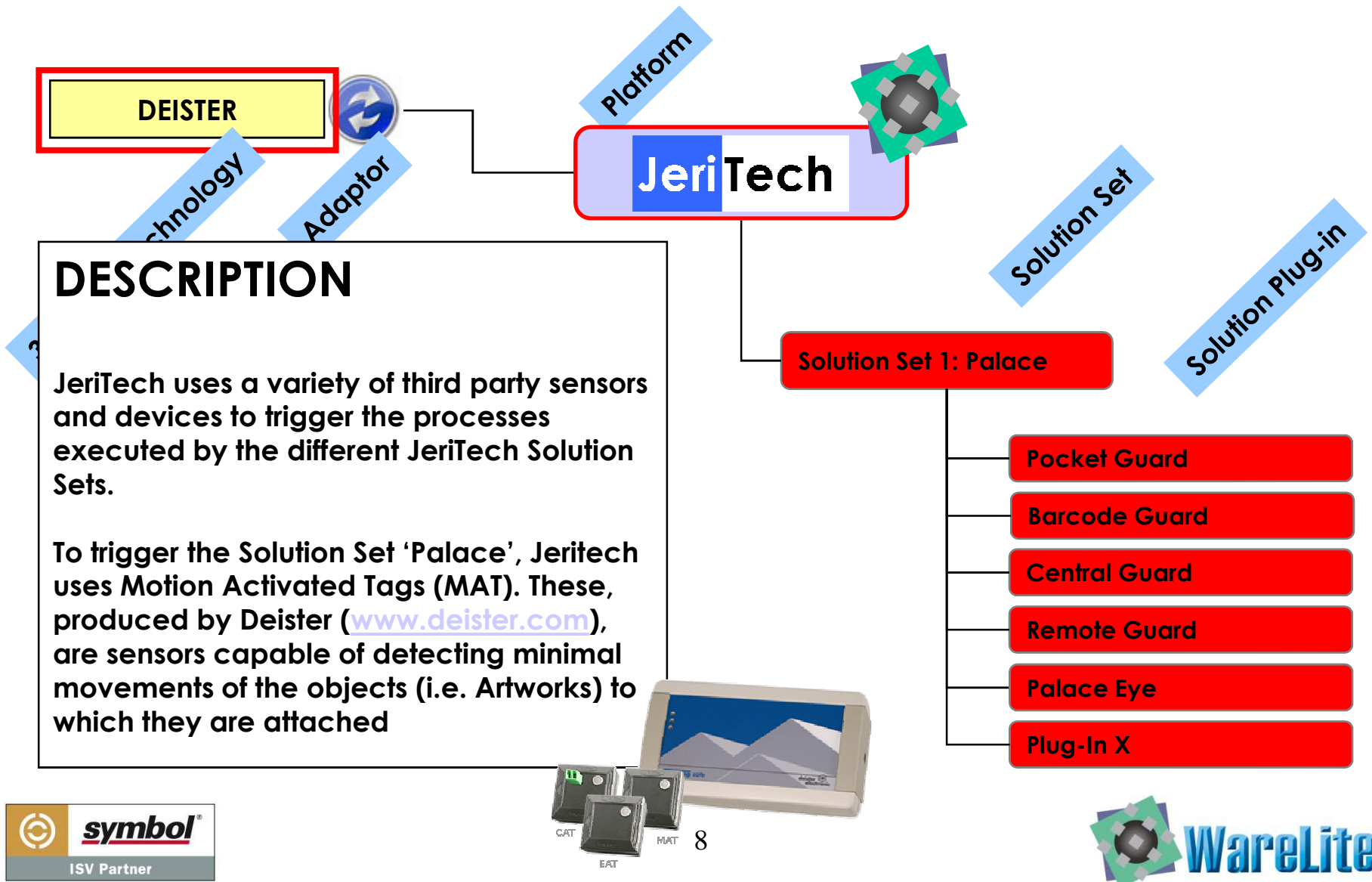
JeriTech: System Architecture

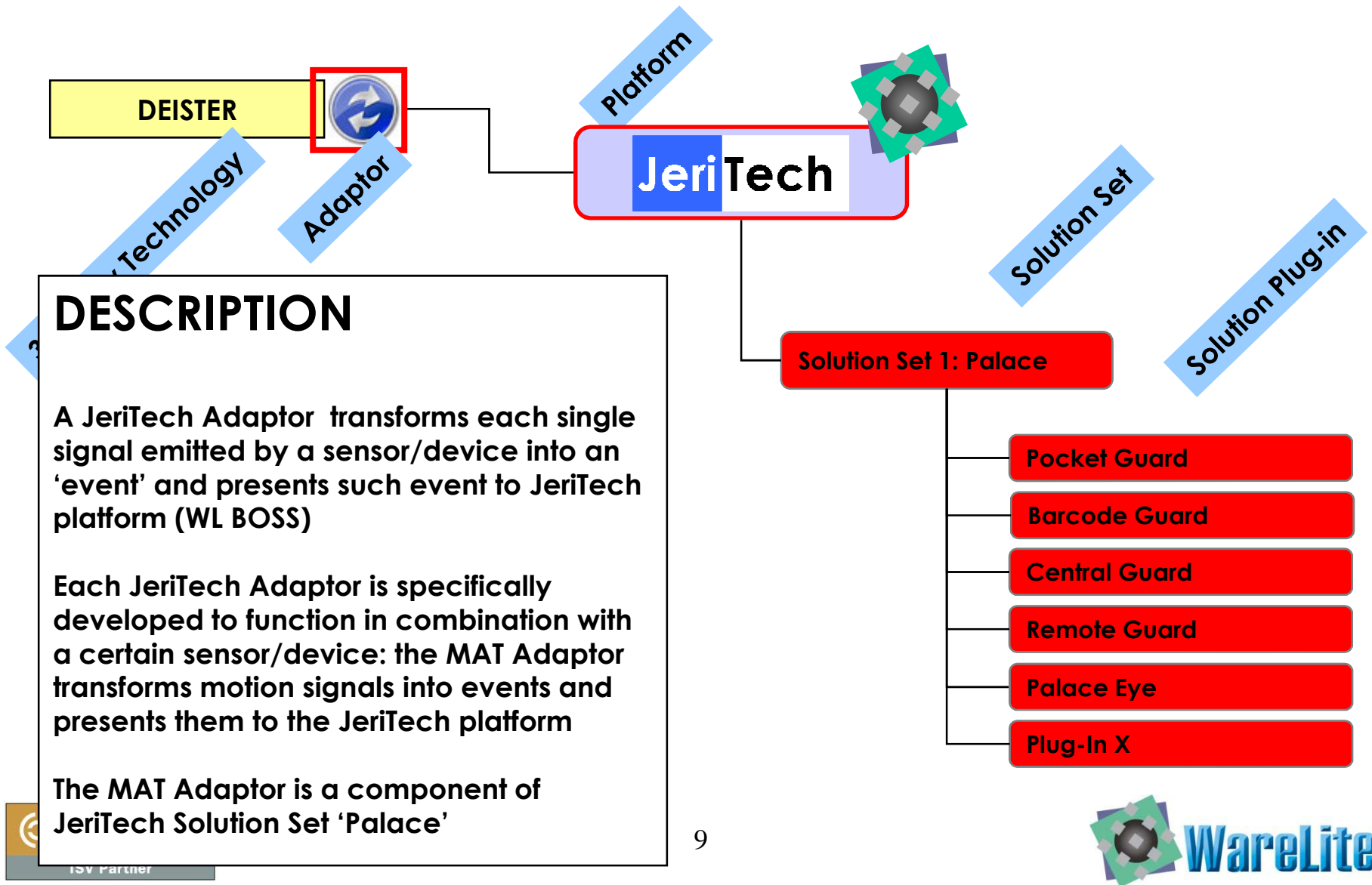


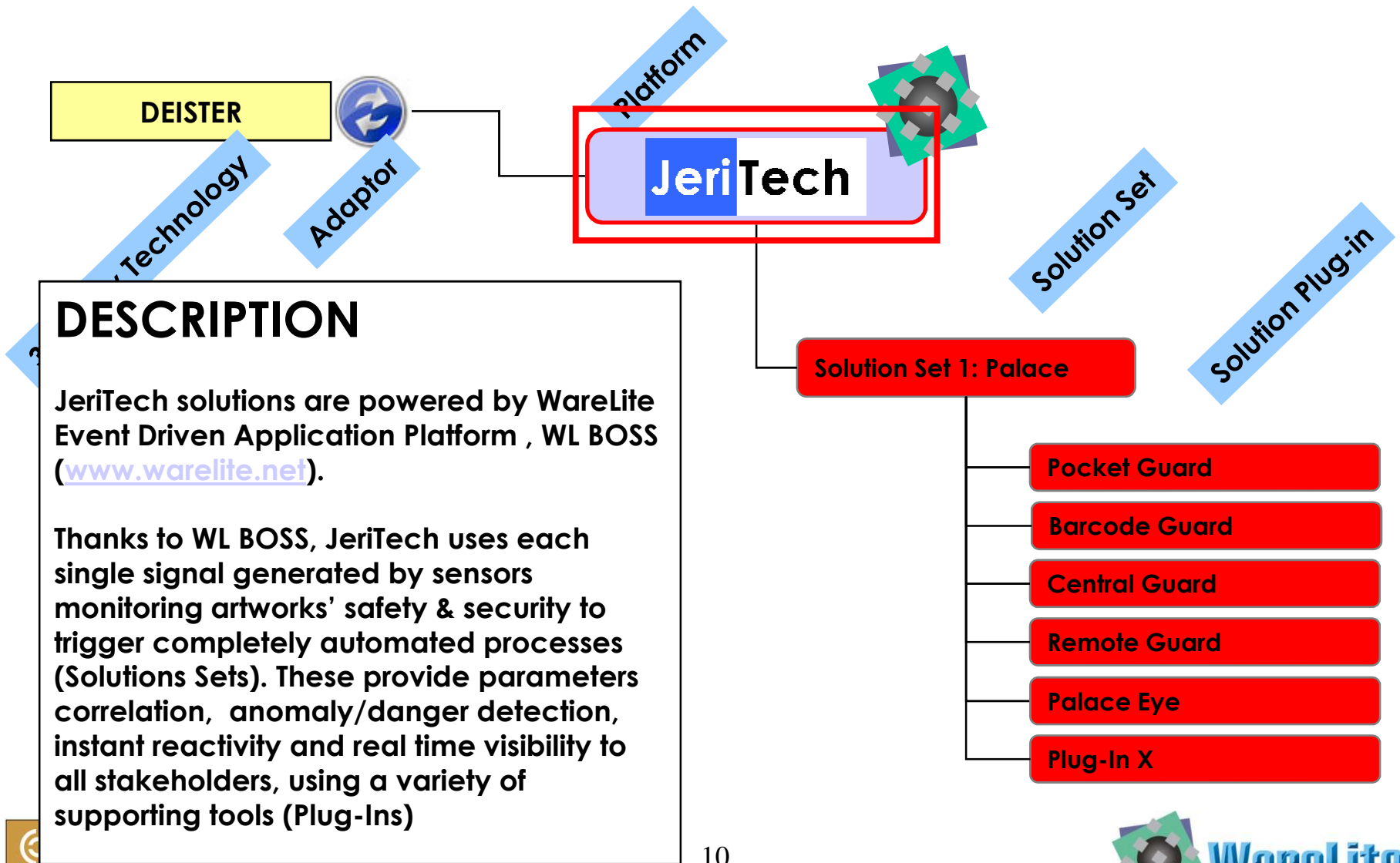
JeriTech Solution Set 'Palace'

JeriTech





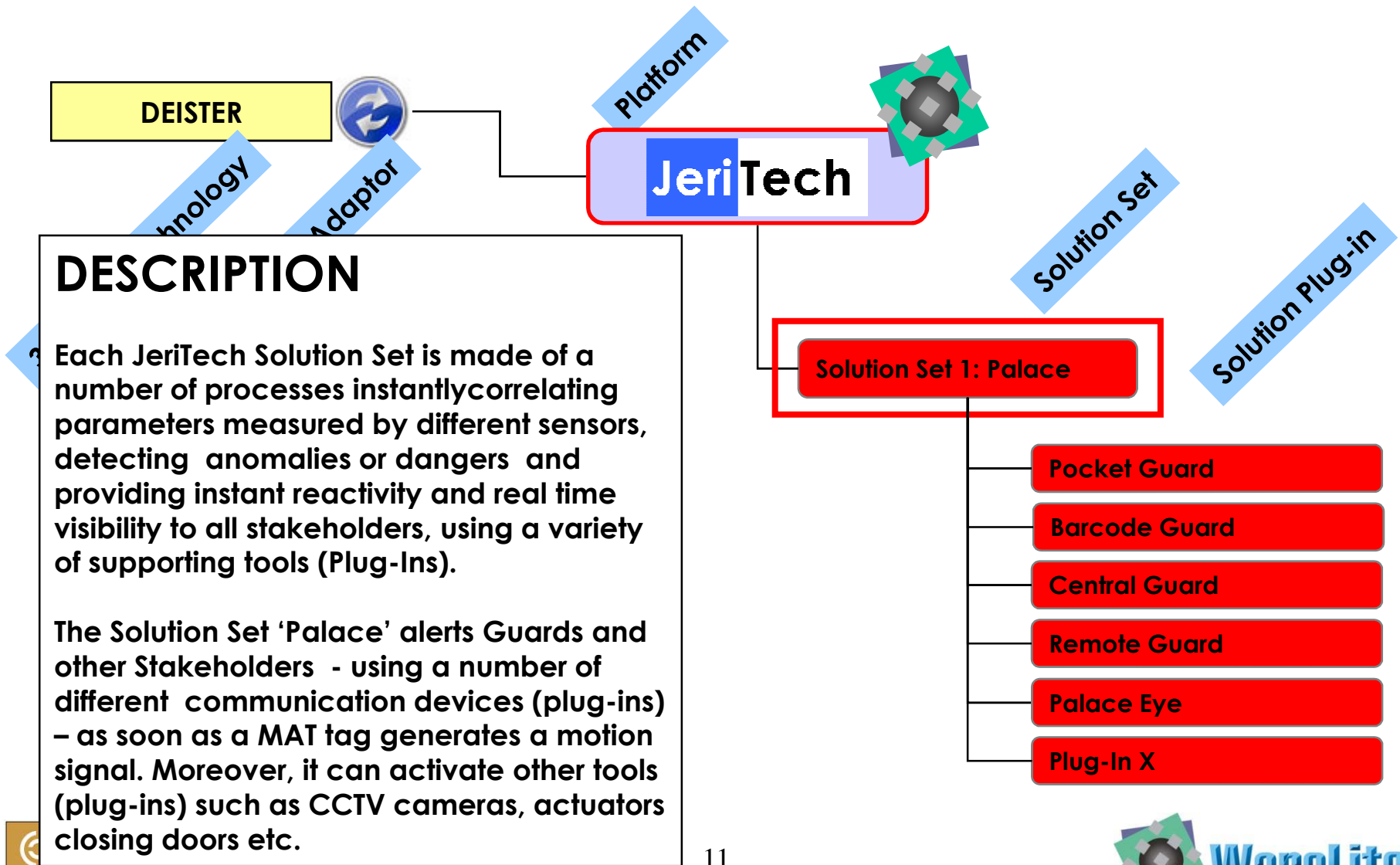




DESCRIPTION

JeriTech solutions are powered by WareLite Event Driven Application Platform , WL BOSS (www.warelite.net).

Thanks to WL BOSS, JeriTech uses each single signal generated by sensors monitoring artworks' safety & security to trigger completely automated processes (Solutions Sets). These provide parameters correlation, anomaly/danger detection, instant reactivity and real time visibility to all stakeholders, using a variety of supporting tools (Plug-Ins)



DESCRIPTION

Each JeriTech Solution Set is made of a number of processes instantly correlating parameters measured by different sensors, detecting anomalies or dangers and providing instant reactivity and real time visibility to all stakeholders, using a variety of supporting tools (Plug-Ins).

The Solution Set 'Palace' alerts Guards and other Stakeholders - using a number of different communication devices (plug-ins) - as soon as a MAT tag generates a motion signal. Moreover, it can activate other tools (plug-ins) such as CCTV cameras, actuators closing doors etc.

DEISTER

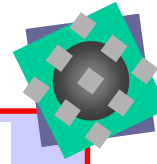
Technology



Motor

Platform

JeriTech



DESCRIPTION

A Solution Plug-In is a process using a third-party device as a support to provide instant reactivity to anomalies or potential dangers detected by the Solution Set processes. The same type of plug-in can be used within different Solution Sets.

As soon as an anomaly or potential danger is detected, the 'Pocket Guard' plug-in sends alert messages to Motorola Enterprise Class Mobile Computers (e.g. Symbol MC50, www.symbol.com) carried by security guards. Within the Solution Set 'Palace', this means sending alerts instantly as soon as a MAT tag generates a signal.

Solution Set 1: Palace

Solution Set

Solution Plug-in

Pocket Guard

Barcode Guard

Central Guard

Remote Guard

Palace Eye

Plug-In X



DEISTER

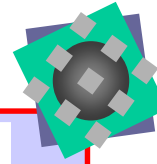
Technology



Processor

Platform

JeriTech



DESCRIPTION

The 'Barcode Guard' plug-in uses Symbol MC50's barcode scanning functionality to enable the guard who's taken charge of the alarm to close it by scanning the artwork's barcode (see the 'AssetManagement' Solution Set description on slide 24)

Other guards - and managers - will have real time visibility over the pending alert closure. The time elapsed between opening and closing an alarm is automatically calculated, allowing the measurement of responsiveness efficiency.

Solution Set 1: Palace

Solution Set

Solution Plug-in

Pocket Guard

Barcode Guard

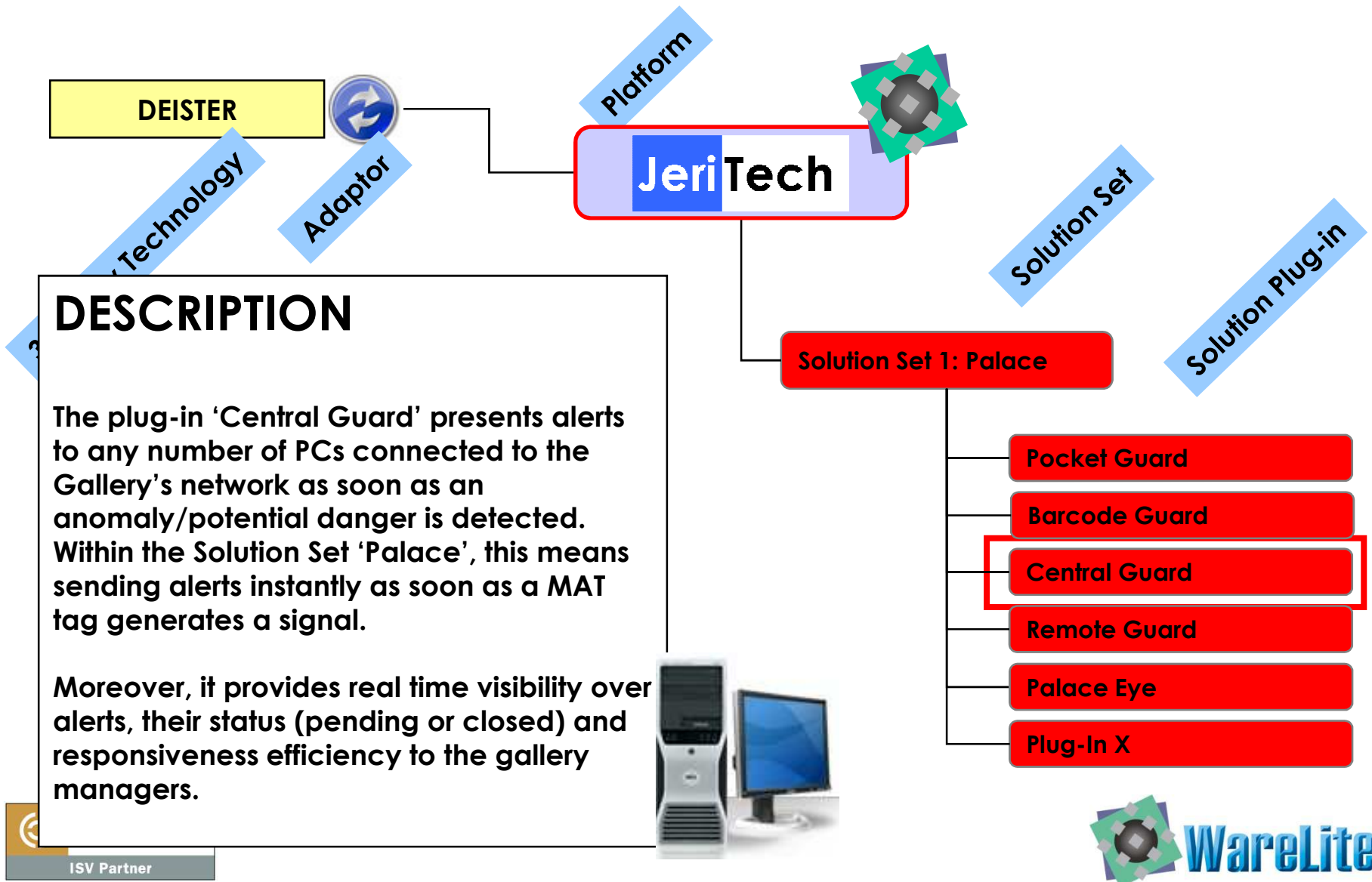
Central Guard

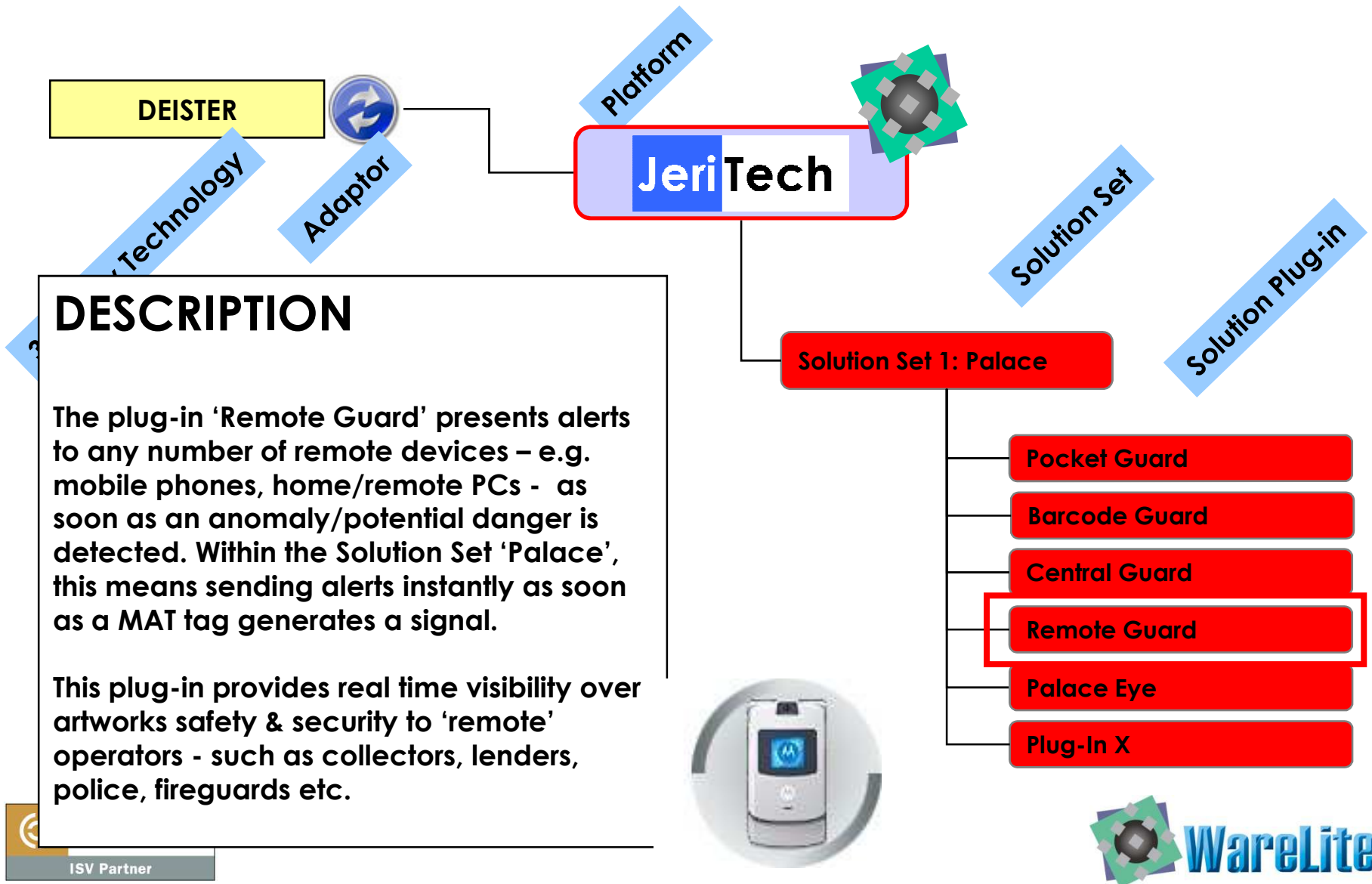
Remote Guard

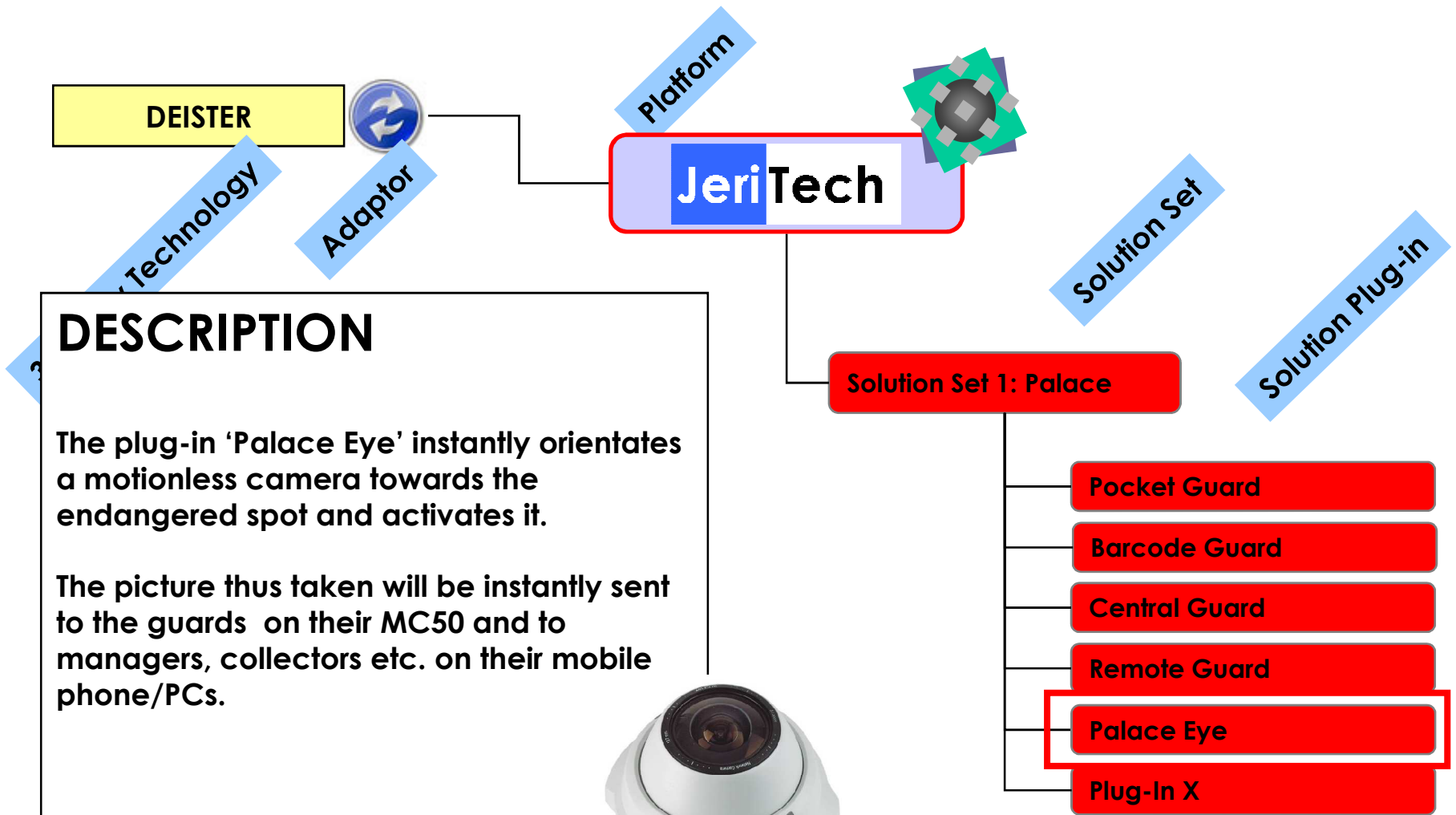
Palace Eye

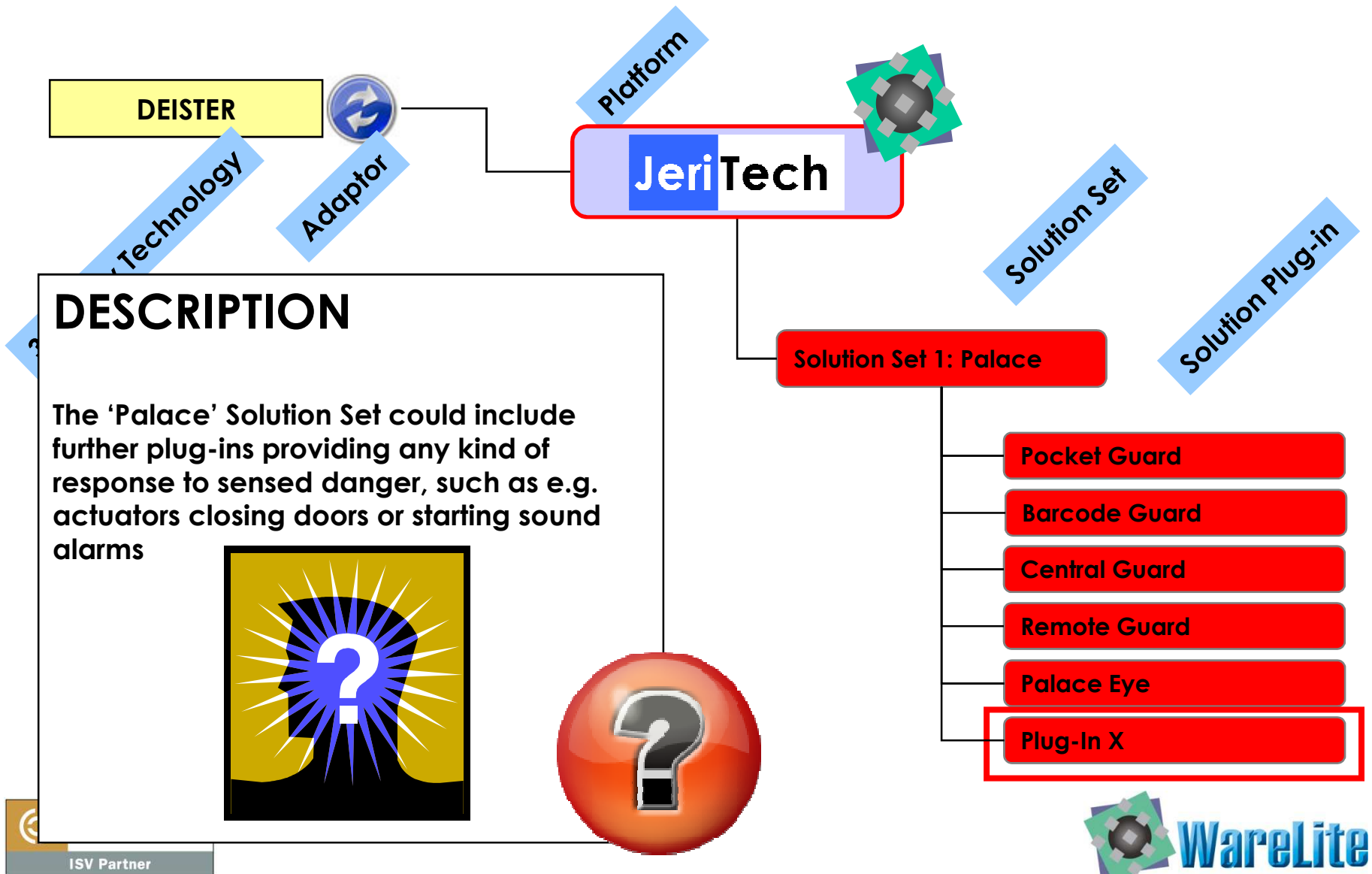
Plug-In X





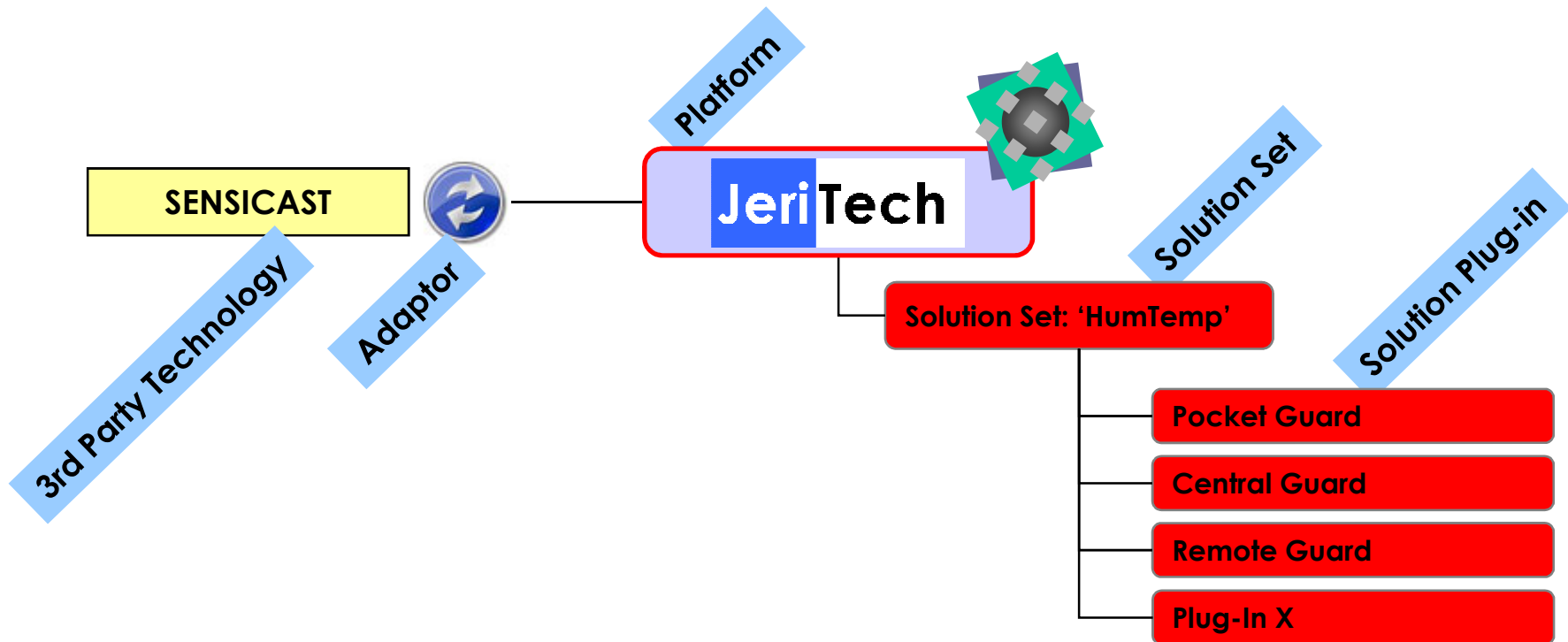






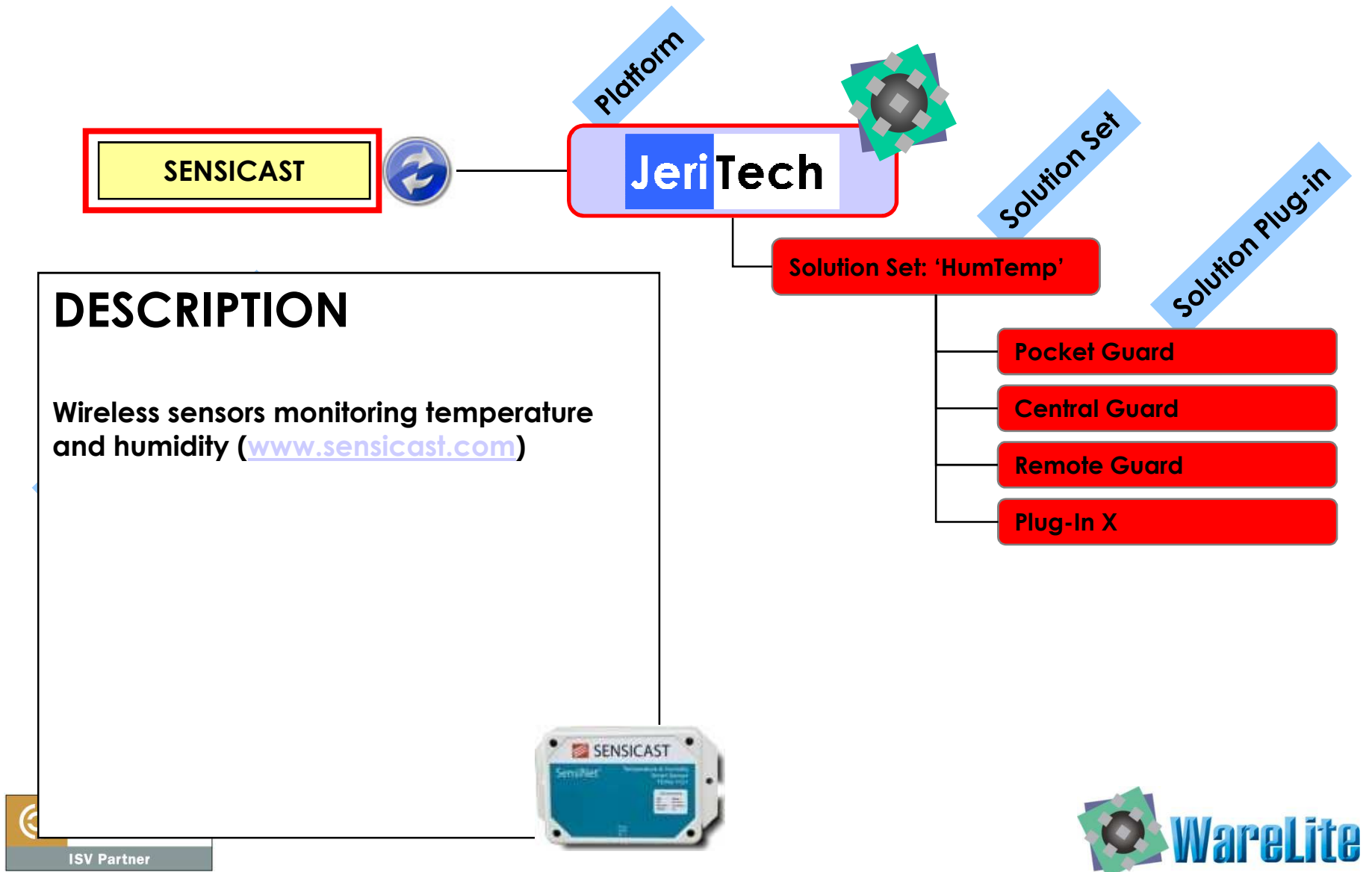
JeriTech Solution Set 'HumTemp'

JeriTech



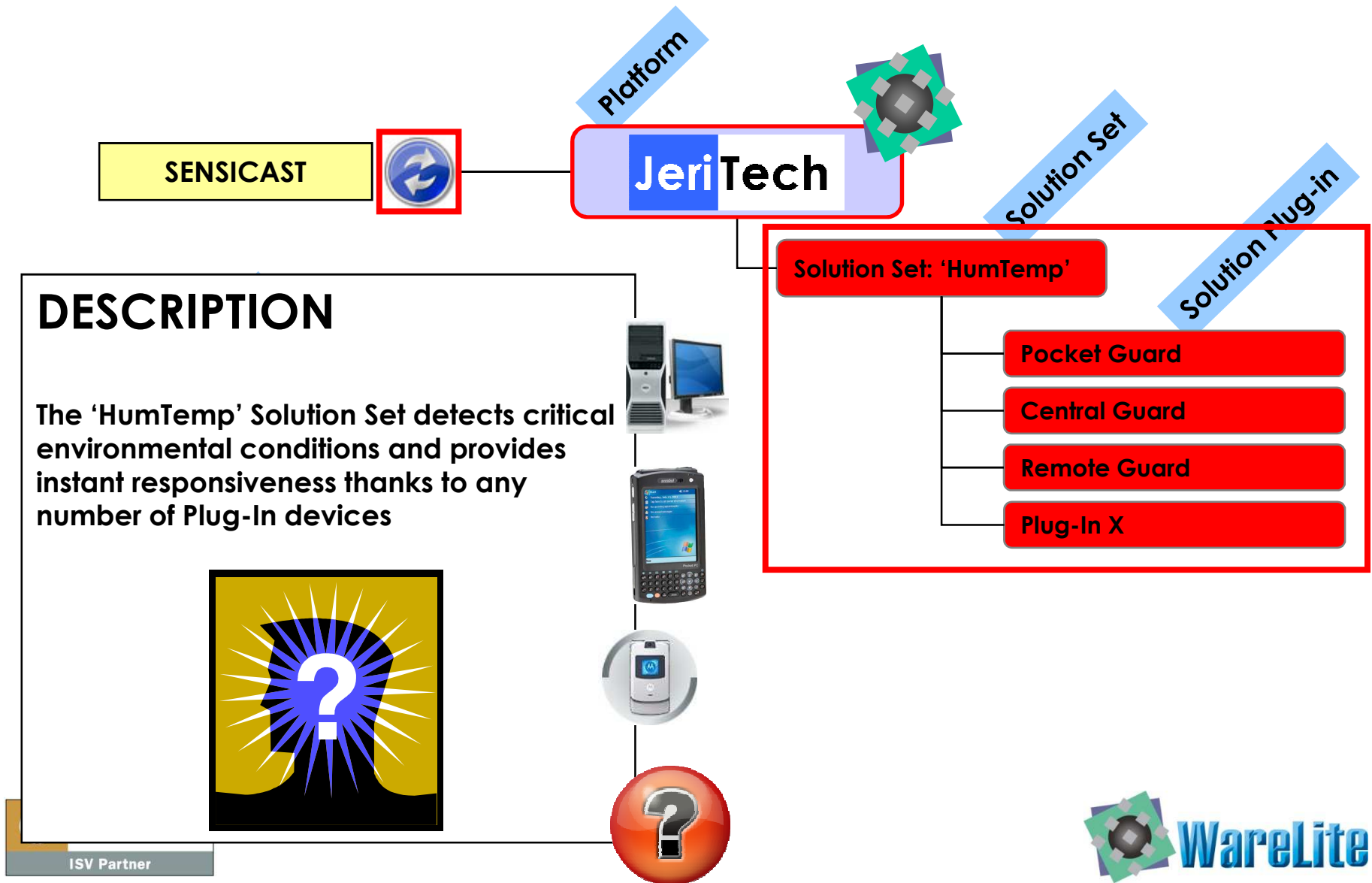
JeriTech Solution Set 'HumTemp'

JeriTech



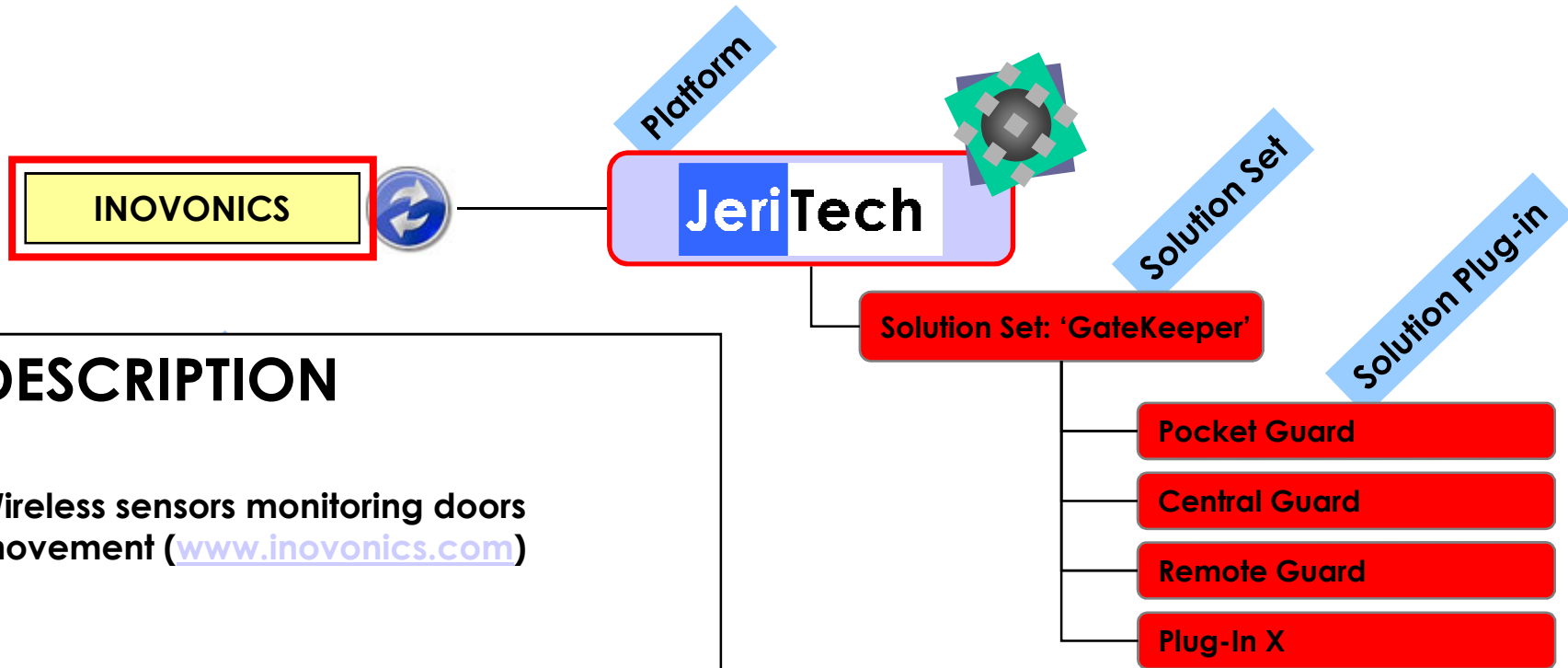
JeriTech Solution Set 'HumTemp'

JeriTech



JeriTech Solution Set 'GateKeeper'

JeriTech



DESCRIPTION

Wireless sensors monitoring doors movement (www.inovonics.com)

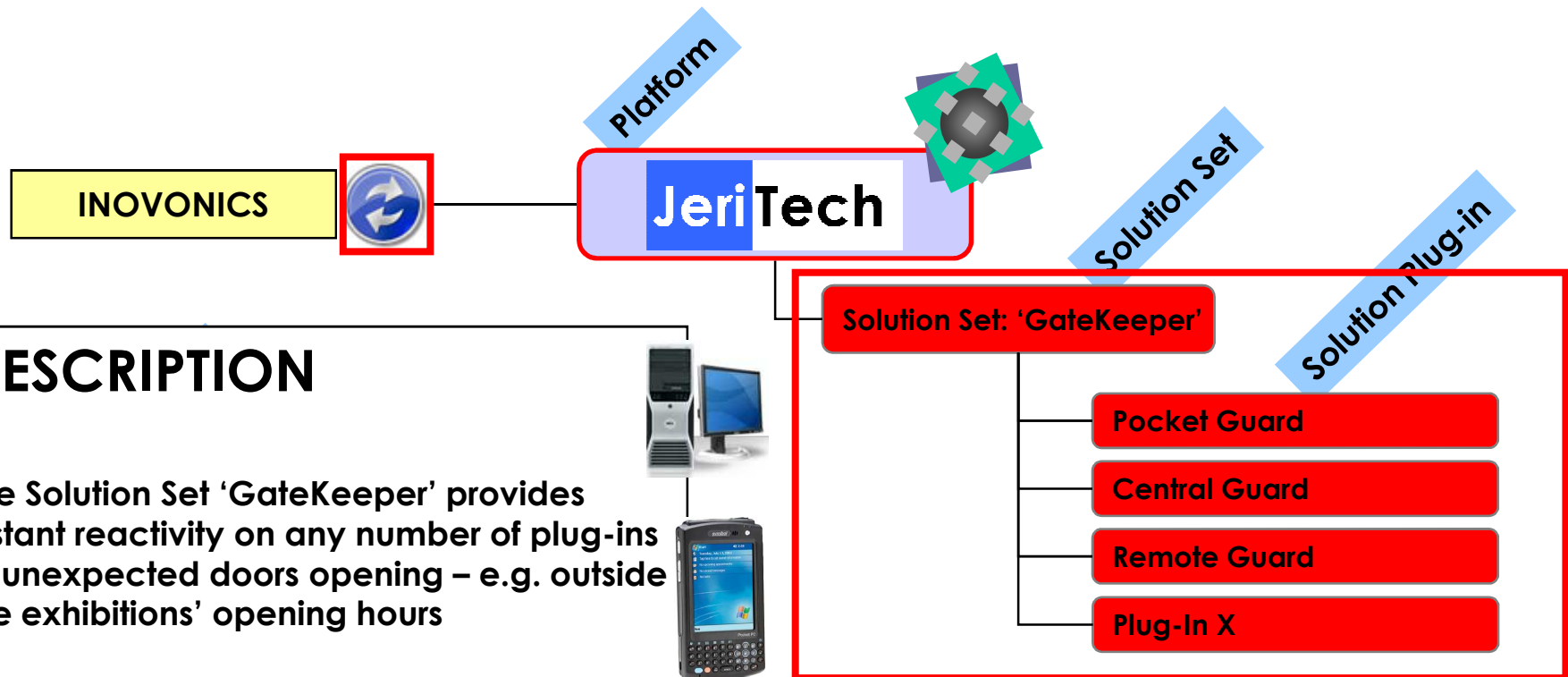


ISV Partner



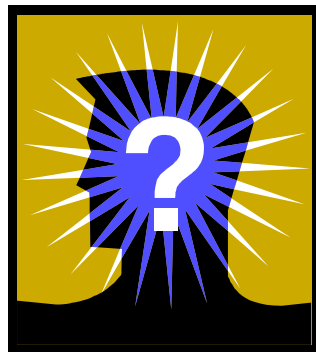
JeriTech Solution Set 'GateKeeper'

JeriTech



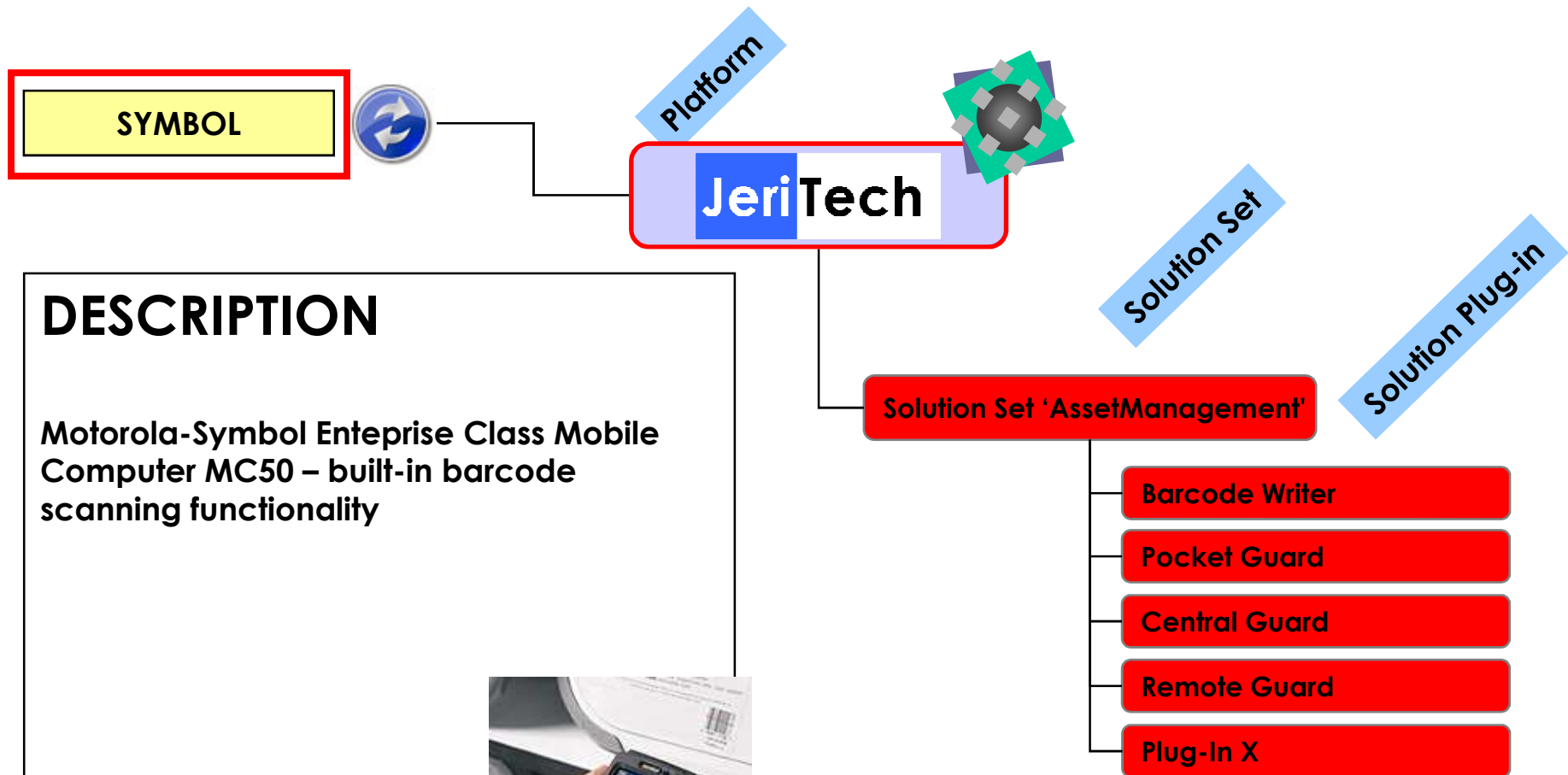
DESCRIPTION

The Solution Set 'GateKeeper' provides instant reactivity on any number of plug-ins to unexpected doors opening – e.g. outside the exhibitions' opening hours




ISV Partner

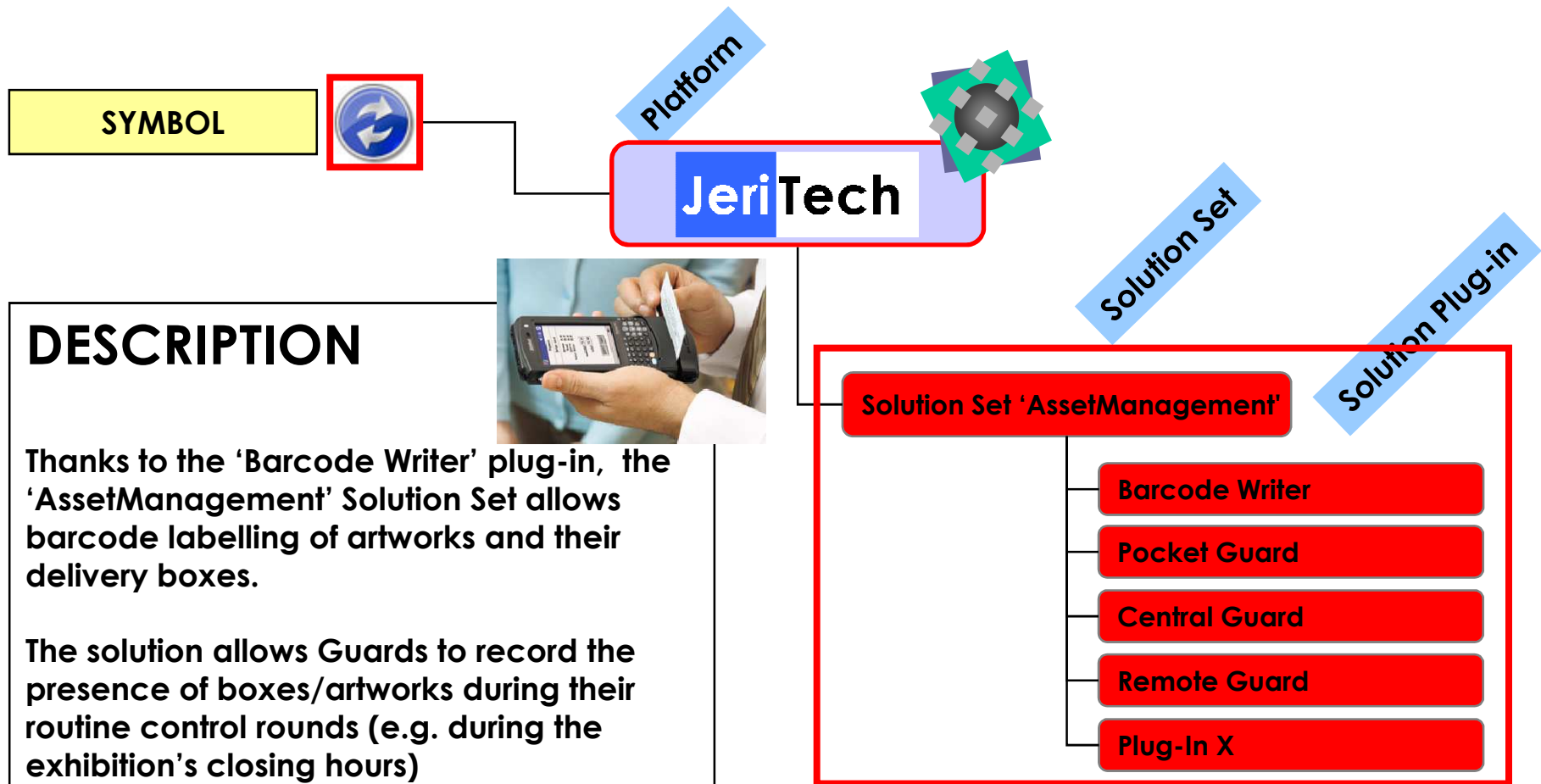




DESCRIPTION

Motorola-Symbol Enterprise Class Mobile Computer MC50 – built-in barcode scanning functionality





DESCRIPTION

Thanks to the 'Barcode Writer' plug-in, the 'AssetManagement' Solution Set allows barcode labelling of artworks and their delivery boxes.

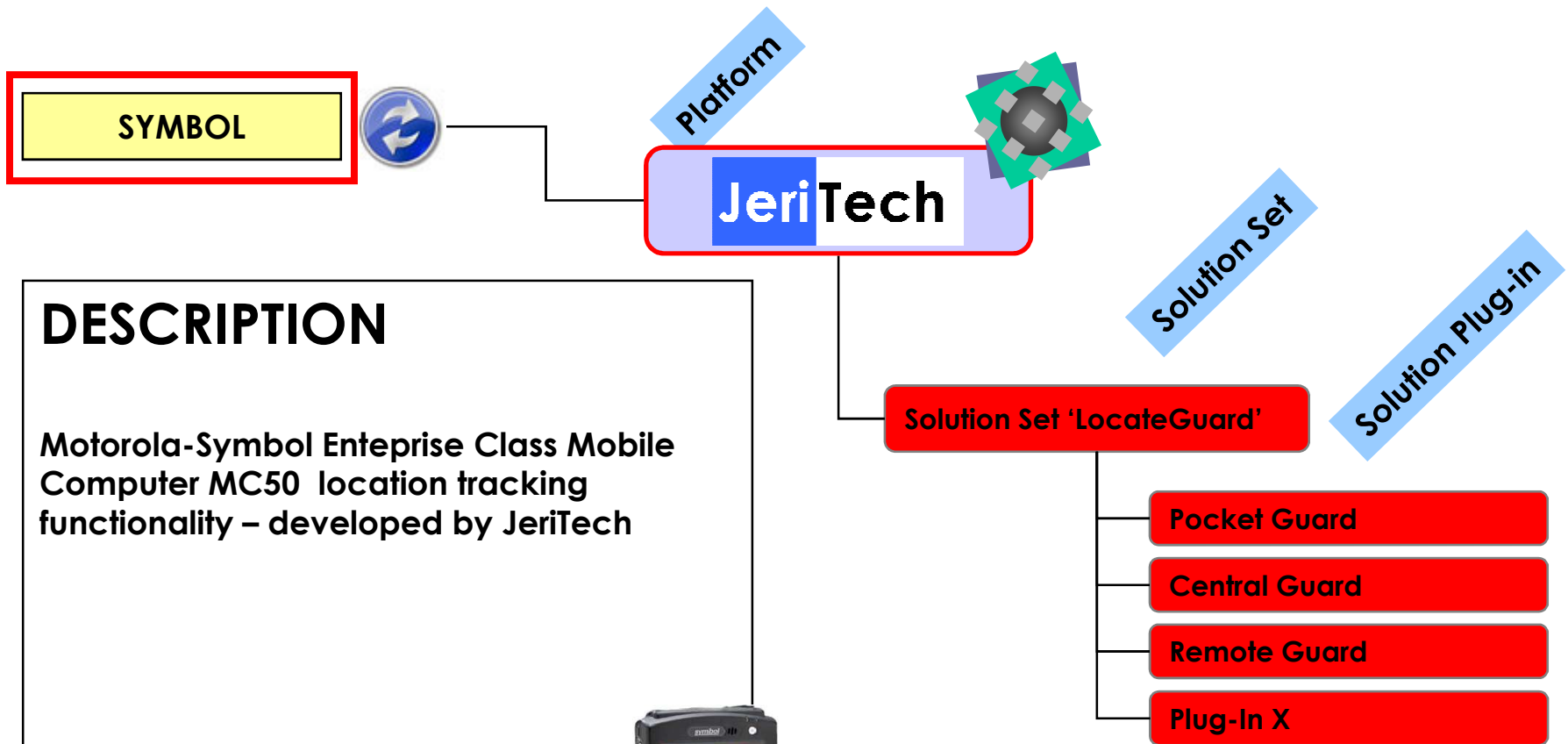
The solution allows Guards to record the presence of boxes/artworks during their routine control rounds (e.g. during the exhibition's closing hours)

As in all JeriTech Solutions, all stakeholders will have real time visibility over such records on any number of different plug-ins.



JeriTech Solution Set 'LocateGuard'

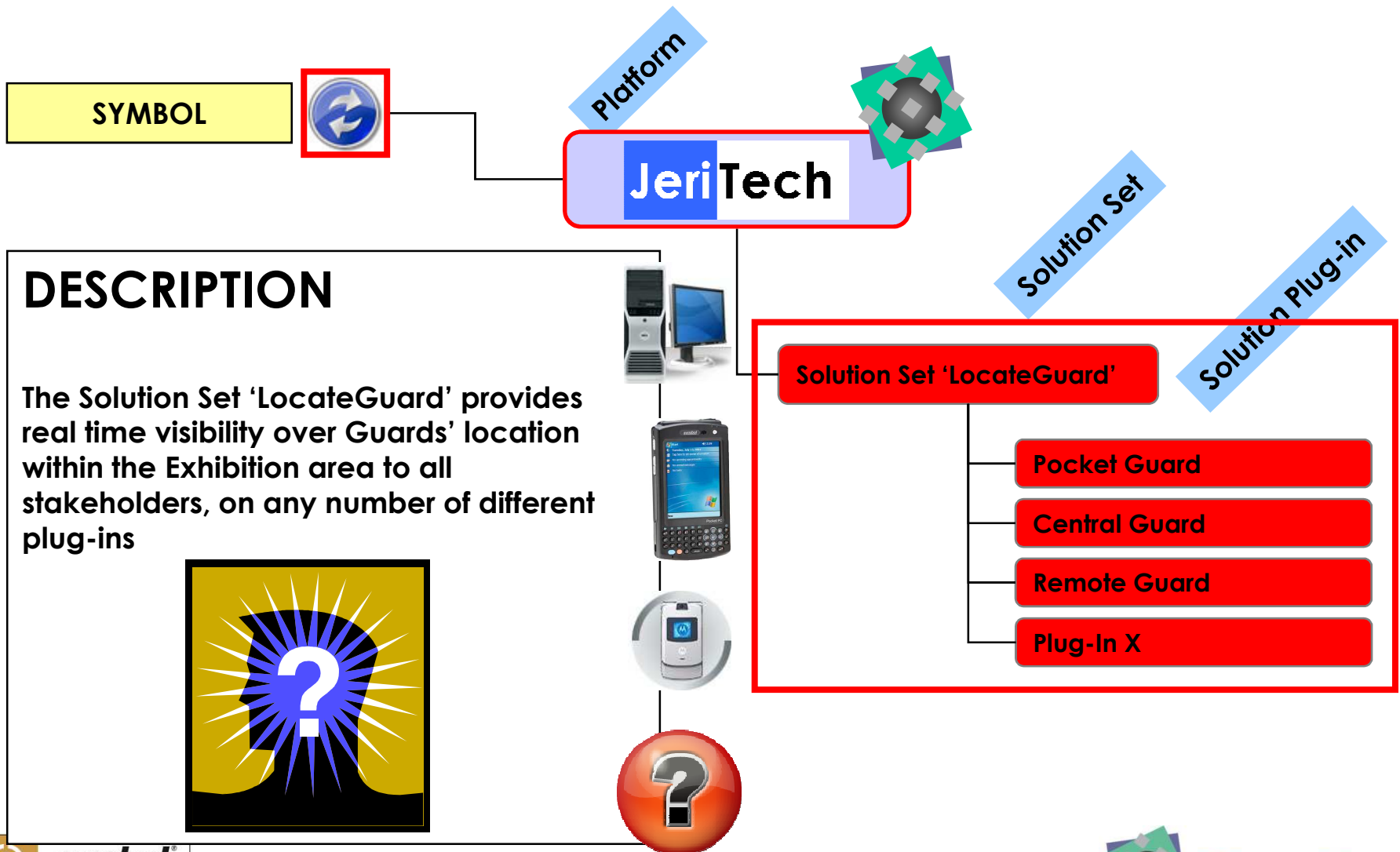
JeriTech

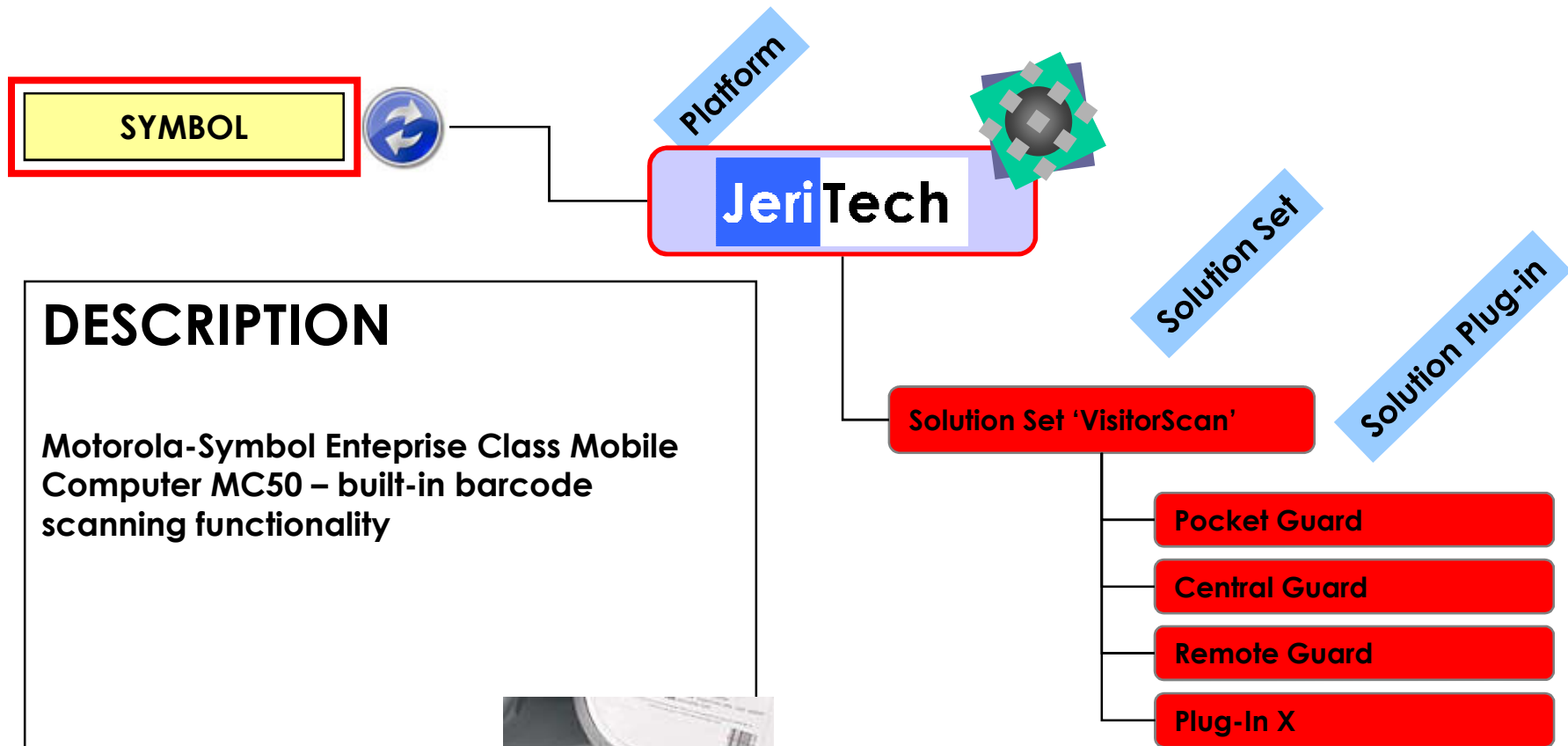


DESCRIPTION

Motorola-Symbol Enterprise Class Mobile Computer MC50 location tracking functionality – developed by JeriTech




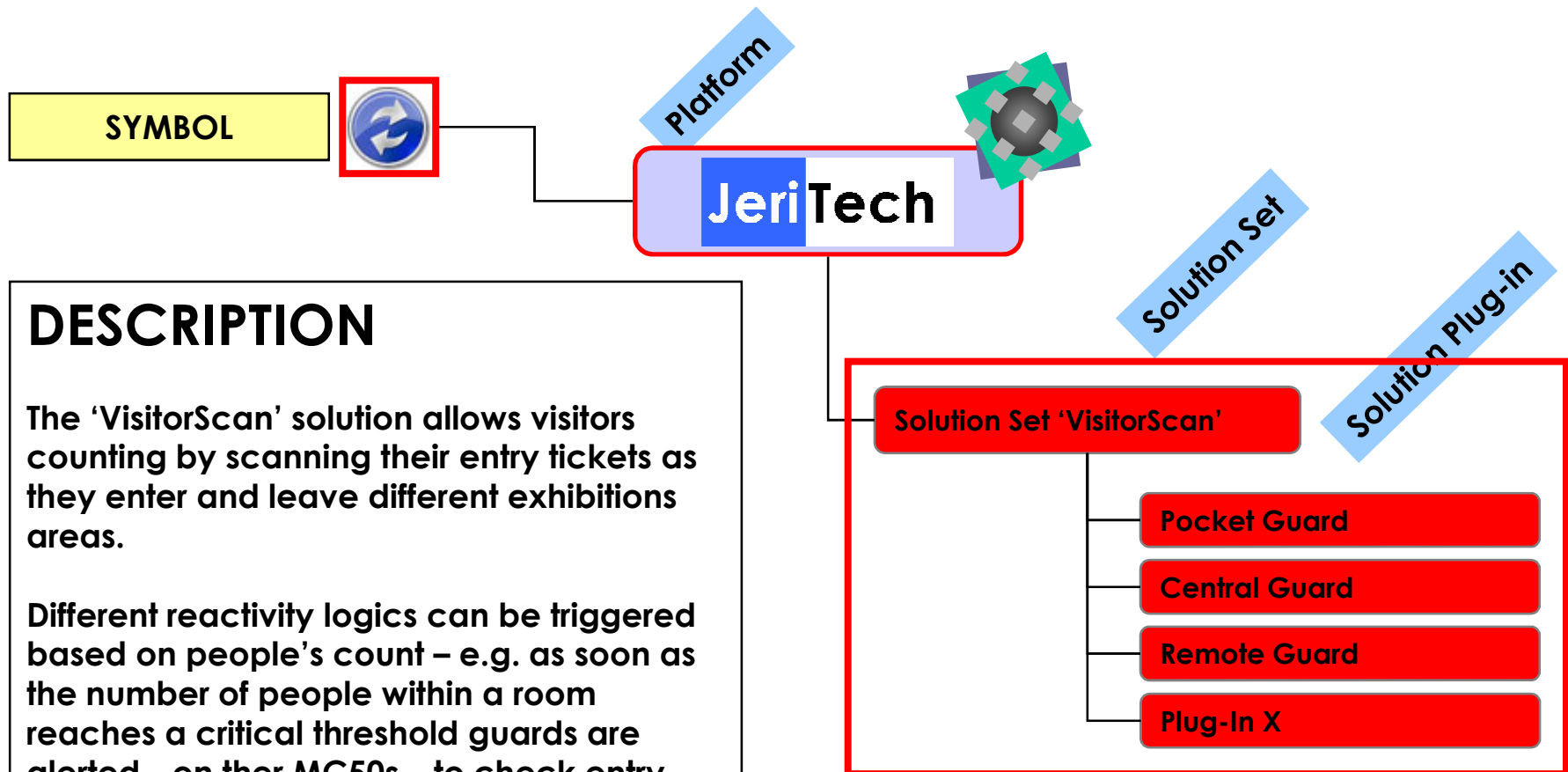




DESCRIPTION

Motorola-Symbol Enterprise Class Mobile Computer MC50 – built-in barcode scanning functionality



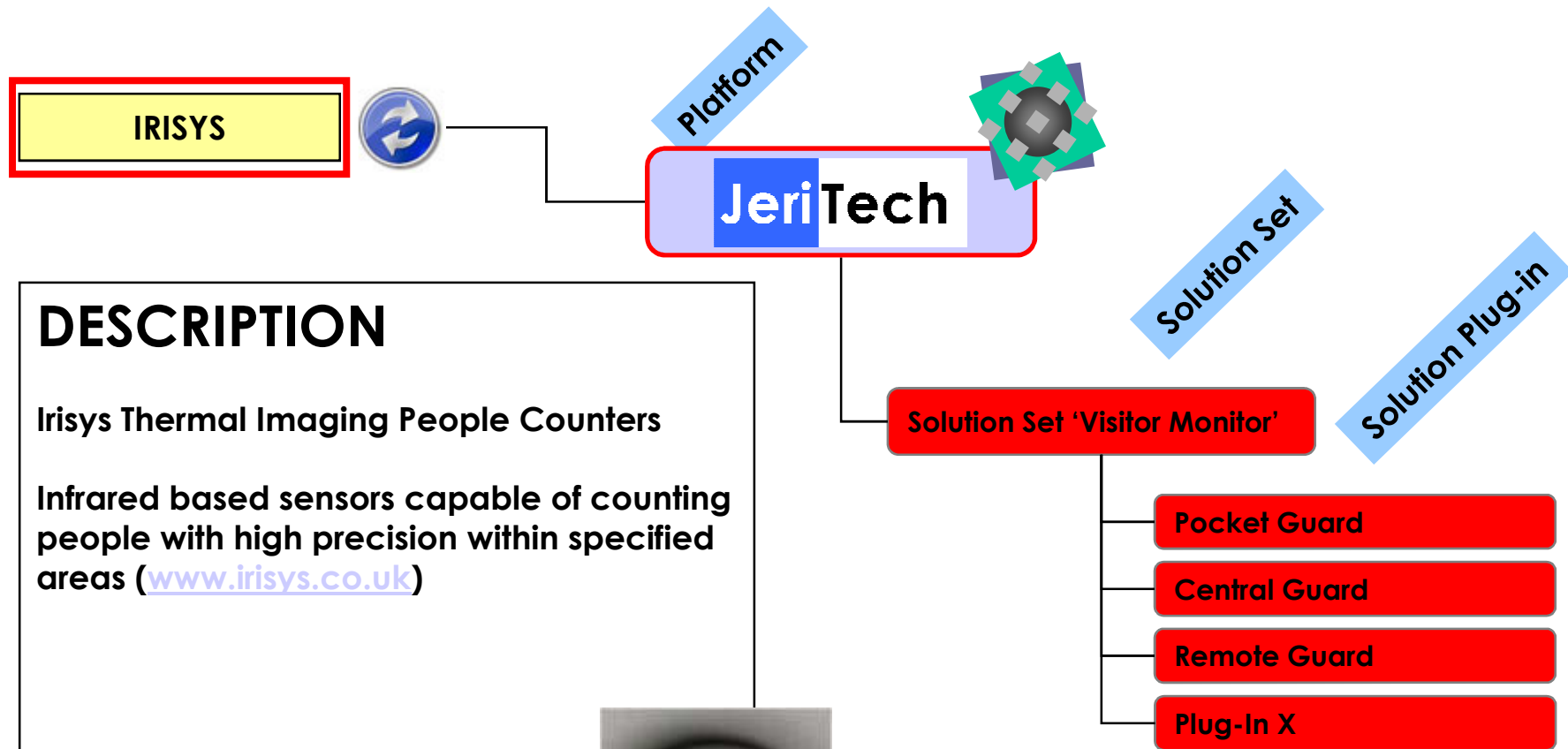


DESCRIPTION

The 'VisitorScan' solution allows visitors counting by scanning their entry tickets as they enter and leave different exhibitions areas.

Different reactivity logics can be triggered based on people's count – e.g. as soon as the number of people within a room reaches a critical threshold guards are alerted - on their MC50s – to check entry flow until the alert disappears.


As in all JeriTech Solutions, all stakeholders will have real time visibility over visitors number on any number of different plug-ins

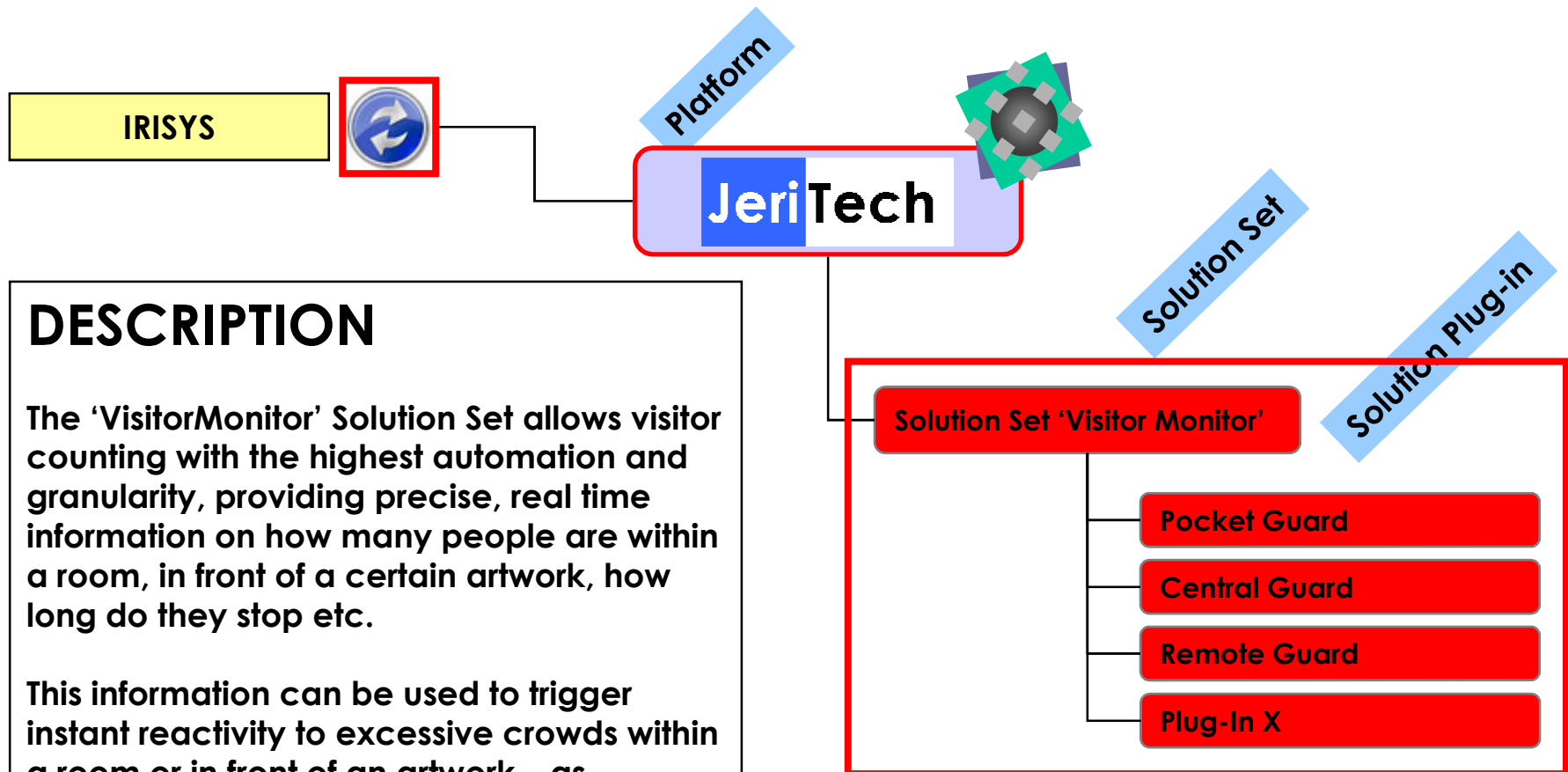


DESCRIPTION

Irisys Thermal Imaging People Counters

Infrared based sensors capable of counting people with high precision within specified areas (www.irisys.co.uk)

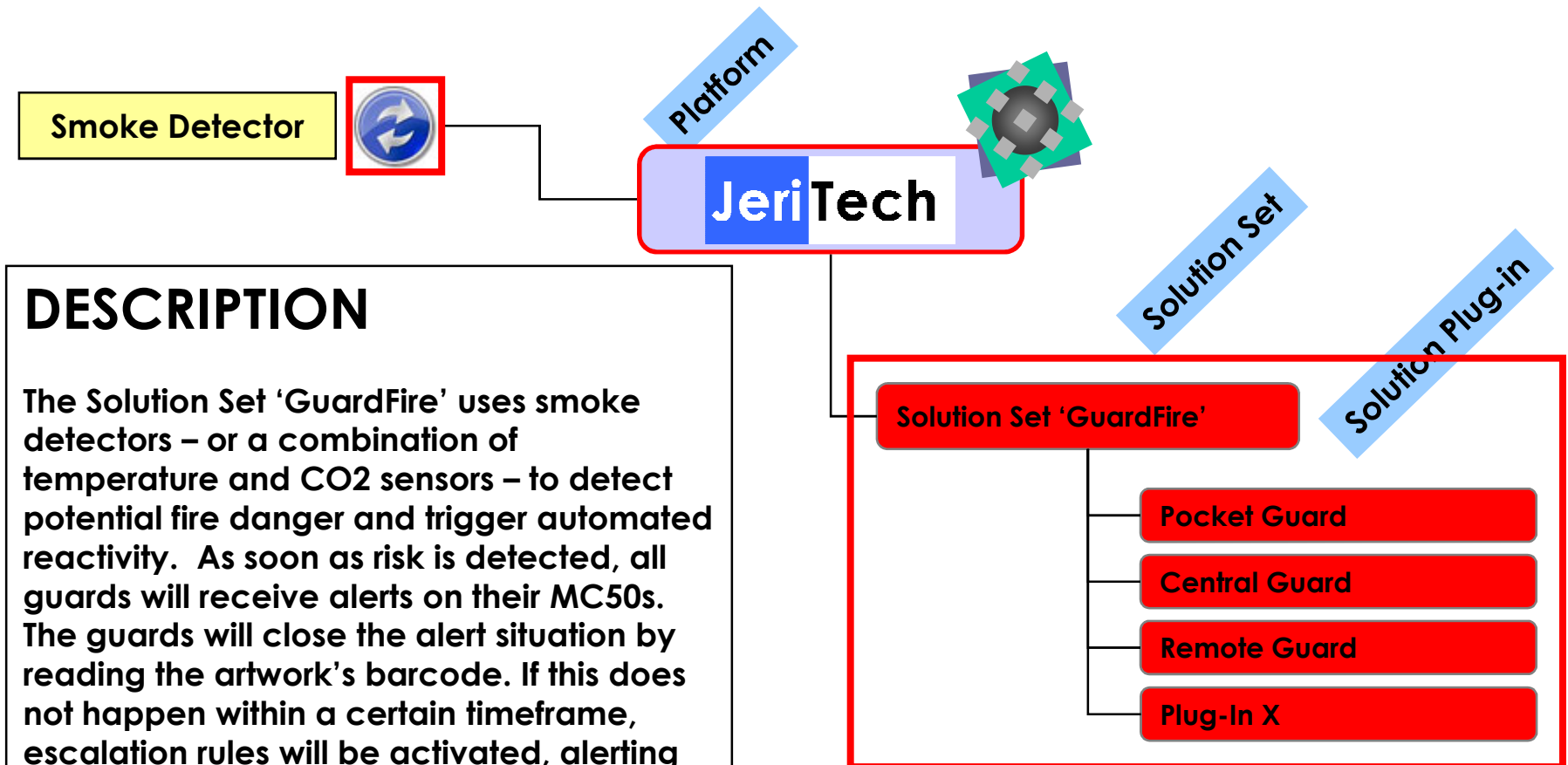




DESCRIPTION

The 'VisitorMonitor' Solution Set allows visitor counting with the highest automation and granularity, providing precise, real time information on how many people are within a room, in front of a certain artwork, how long do they stop etc.

This information can be used to trigger instant reactivity to excessive crowds within a room or in front of an artwork – as outlined for the 'VisitorScan' Solutions - as well as be used to optimize exhibitions' layouts



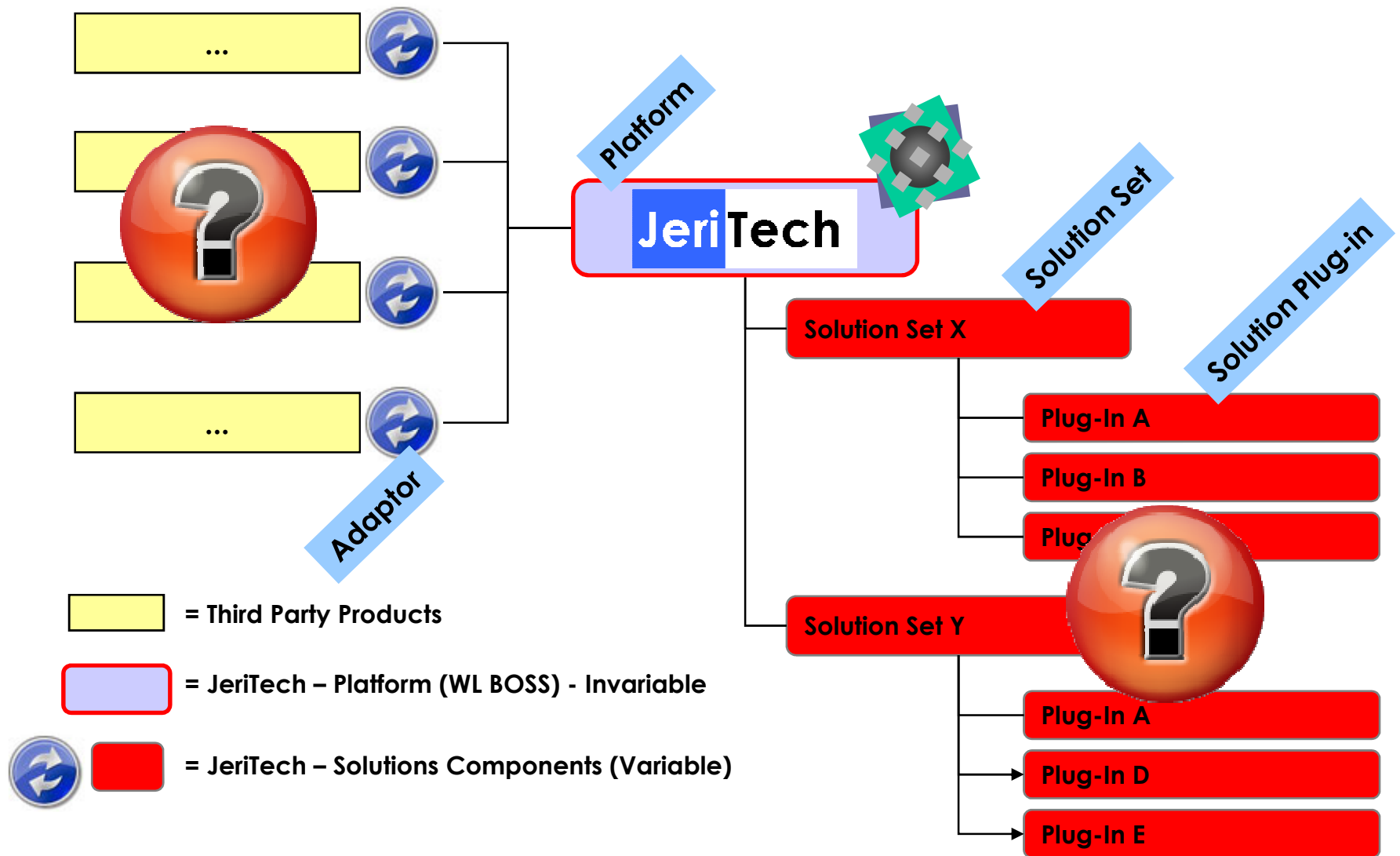
DESCRIPTION

The Solution Set 'GuardFire' uses smoke detectors – or a combination of temperature and CO2 sensors – to detect potential fire danger and trigger automated reactivity. As soon as risk is detected, all guards will receive alerts on their MC50s. The guards will close the alert situation by reading the artwork's barcode. If this does not happen within a certain timeframe, escalation rules will be activated, alerting fireguards etc. Other plug-ins can be activated - e.g. the Palace Eye plug-in will provide an instant picture of the area at risk and send it to the guards' MC50, the fireguards' server etc.



JeriTech: Infinite Potential & Total Flexibility

JeriTech



- **Unified visibility over all parameters relevant to the safety of artworks, including environmental conditions (e.g. humidity and temperature sensors) and security (e.g. motion sensors)**
- **Readings from different types of sensors are instantly and automatically correlated to identify anomalies and dangers**
- **When dangers or anomalies are detected, instant alerts are presented on any chosen media (e.g. Pocket PCs, mobile phones, standard PCs) to guards, managers, collectors etc.**
- **Automated, instant reaction to danger for enhanced protection. A motion sensor signal can instantly alert guards, activate sound alarms, orientate CCTVs towards the signal's source, close doors etc.**
- **All solutions can be quickly modified and extended to measure new parameters and take different actions**
- **Future-proof technology, capable of using any new devices - including sensors and plug-ins – available in the future**
- **A scalable platform, capable of expanding in response to increased demands**

- **Reduction of Safety & Security systems' management costs**
- **Reduction of exhibitions/museums/auction houses management costs**
- **Increase in resources effectiveness & efficiency – measurable in real time**
- **Increase in personnel satisfaction**
- **Increase in artworks' safety**
 - *Better protection from environmental risks*
- **Increase in artworks' security**
 - *Better protection from theft, accidents, vandalism*
- **Reduction in Insurance Premiums**
- **Increase in Collectors and Lenders' confidence**