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MUTIARA SMART COMPUTING SDN BHD
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Global Edge Through Software Testing

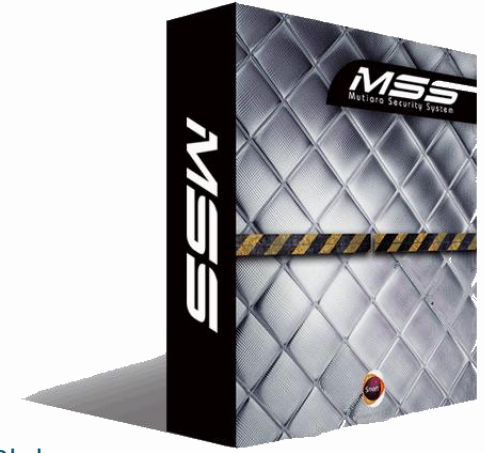


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MSCSB ?

Formerly known as MIMOS Smart Computing Sdn. Bhd.

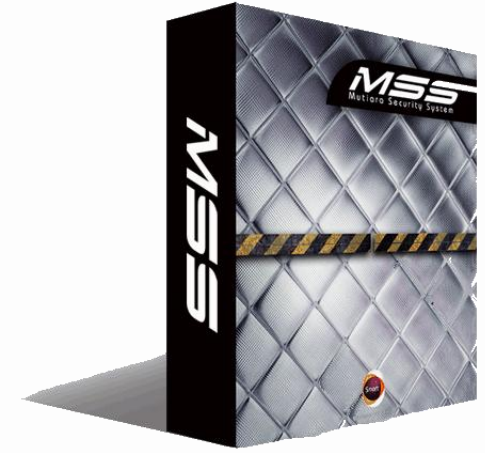


- Establish in 1998 with RM10 millions paid-up capital
- Specializing in ICT Services/Consultancy, ICT Equipment Maintenance, Production & Distributing of ICT Equipment/Hardware.
- Expanded to ICT Biometric Security System development using Facial Recognition Technology (FRT) called Mutiara Security System (MSS).
- Having 20,000 sq. ft. of manufacturing, assembly, sales & hardware development facility.



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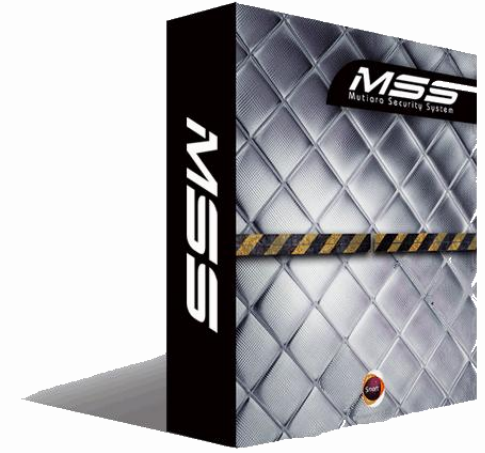
Software Testing

- ❑ **Software testing** is an investigation conducted to provide stakeholders with information about the quality of the product or service under test.
- ❑ Software testing also provides an objective, independent view of the software to allow the business to appreciate and understand the risks at implementation of the software.
- ❑ Test techniques include, but are not limited to, the process of executing a program or application with the intent of finding software bugs and minor/major defects (vulnerability).



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Software Testing

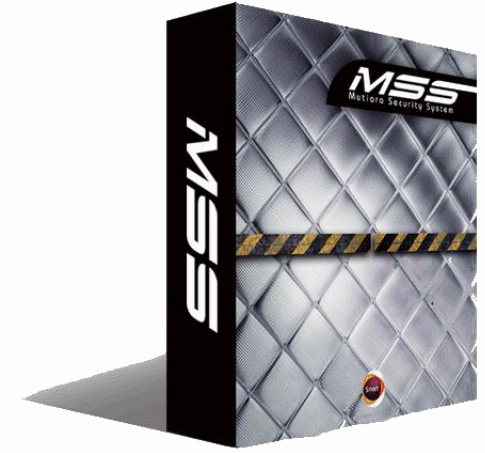
- Meets the business and technical requirements that guided its design and development
- Works as expected and meet the scope of the development
- Can be implemented with the same characteristics
- To meet industrial standard – Financial, Military, etc.
- and many more.



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Software testing is infamous!



- ❑ Our company are producing software since 1999 in various fields and platform.
- ❑ Our objective during development is to complete the development as soon as possible, deliver the products and collect the payment with the lowest investment as possible.
- ❑ Settle the problem or debug the errors as it goes.
- ❑ Basically we are allowing the software to be tested by our clients in customers operation environment.

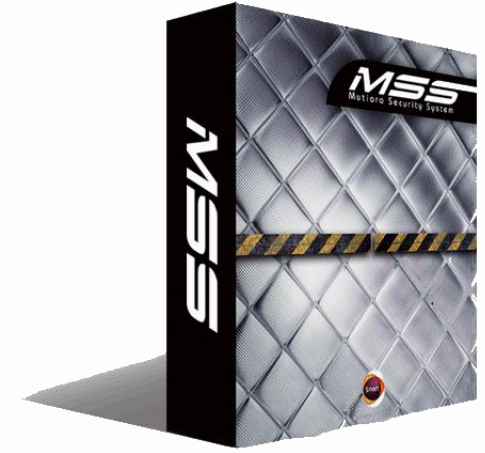
- ❑ For many companies, the software will be tested in 2 main categories-
 - Meeting the scope
 - No error message – let it run and see if it fails.



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Software testing is infamous!

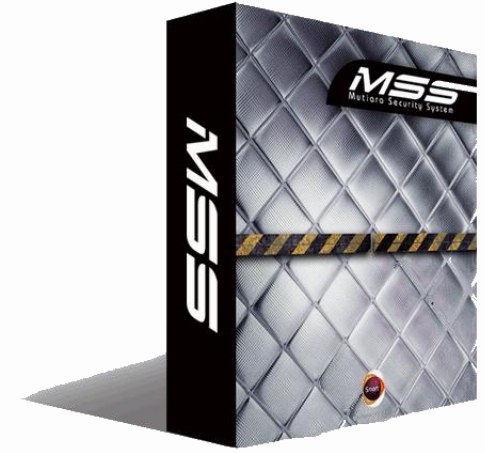


- ❑ In many cases, or in most cases, customers never ask about the testing.
- ❑ Most customers and the developers assume that if the software works as per scope, then it met the requirement.
- ❑ For the companies, who develop the software “No ask and No answer” when it comes to the software developments.



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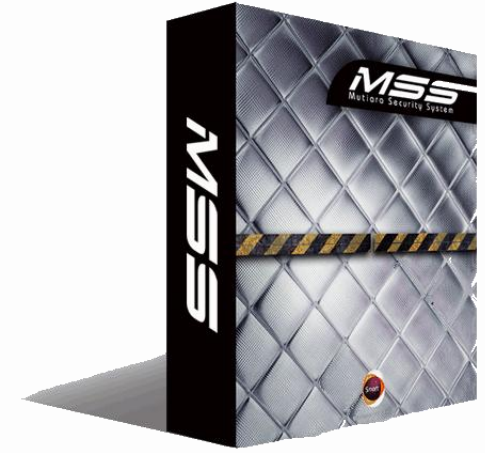
Why these happens?

- Is it the cost the main factor for the software are not properly tested ?
- Is it the Knowledge or Awareness ?
- No Standard/Common Criteria for GTM requirements ?
- ??????????????



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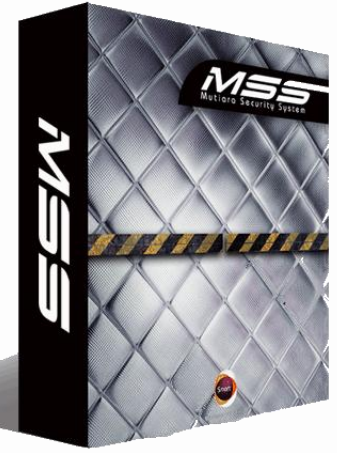
In our opinion.

- Is the **awareness**.
- It's the **requirements (Customers)**.
- It's a **standard** – There must be an imposing mechanism for the standard such as MS (MALAYSIAN STANDARD), FC, CE for electronics products.



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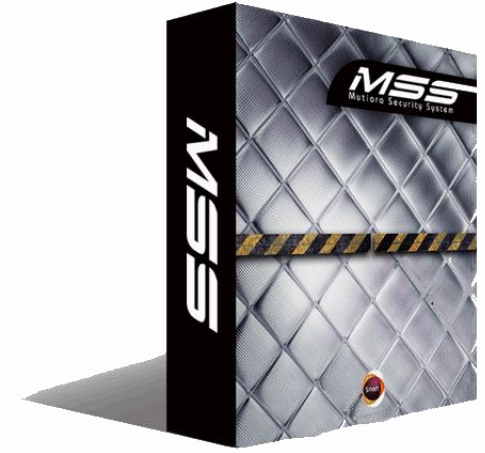
How we come to adopt

- Customer requirements.
- To boost our confidence in our products
- And it starts when we engage our first foreign customer. – How do you assure your product is properly tested?



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Why these happens?

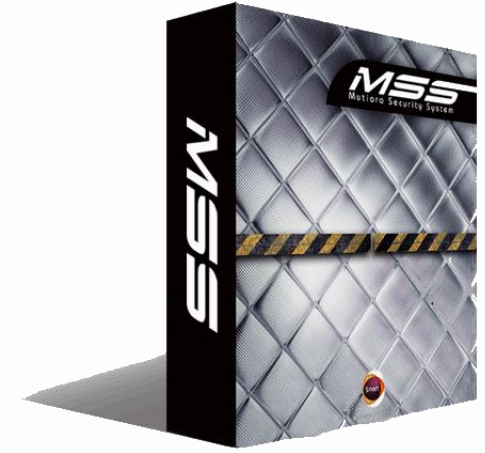
- Customers awareness.
- Customers knowledge.
- Developers awareness.
- Developers knowledge
- The existent of standard body to support and to certify.
- Cost and time.



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How to resolve (our suggestions)



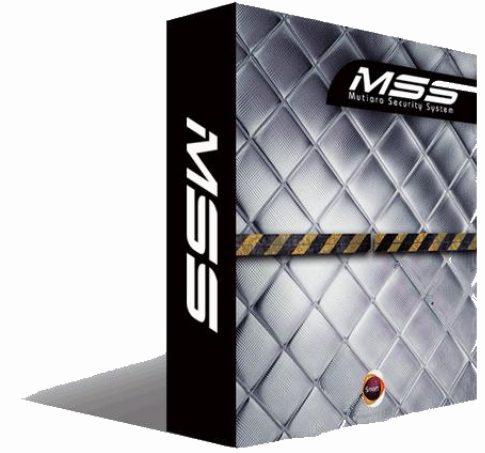
- Incorporate the certifications of the software related products as a must in the product specifications.
- To make cheap or FOC to acquire the standard.
- Intensify the awareness campaign.
- To make it easy for the software producers to engage the certifications body (probably every region on center).



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How to resolve (our suggestions)

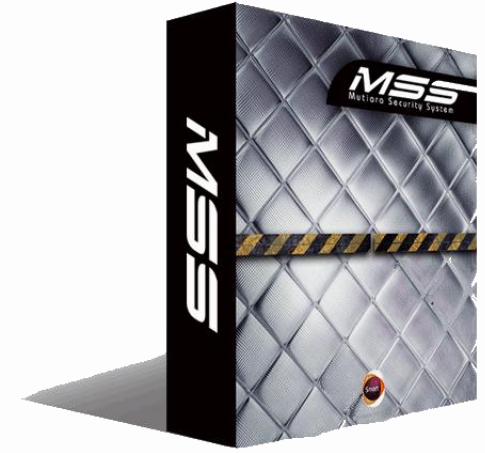


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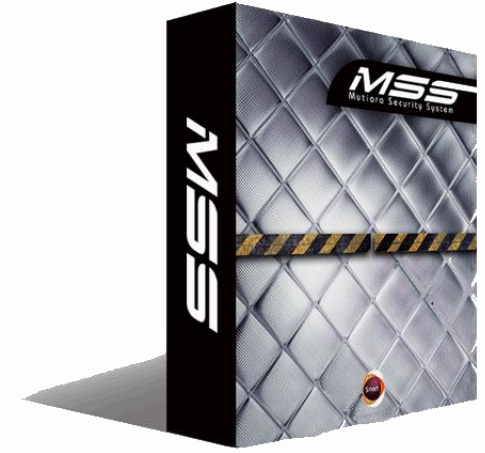
Preparation needed.

- Adequate human capital resources – introductions of related courses in our education system (with a certification)
- Fund or grant for companies who are engaged in SW testing certifications for their products.
- Adequate organization or certification bodies nationwide
- Etc...



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Lesson Learned

- ❑ Our product are delayed to market for close to 1 year due to certifications challenges.
- ❑ It's much more easier for us and our customer to accept the SW products with a certifications (3rd party).
- ❑ We can now confidently bring our software to global with a propel certifications.



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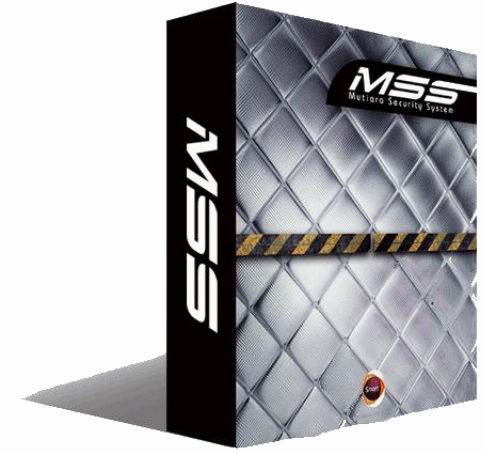


Mutiara Security System (MSS)



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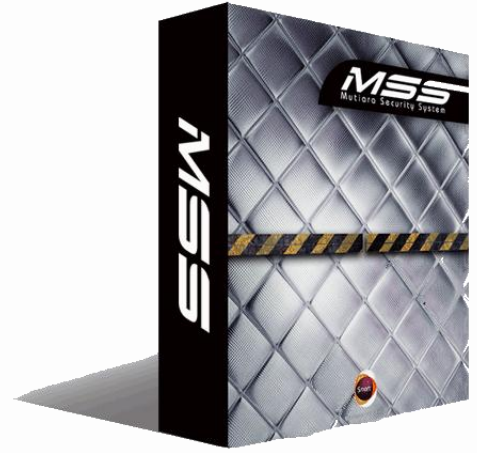
What is MSS?

- ❑ A computer security system that mainly uses Face Recognition Technology (FRT) to automatically authenticate its user before they could perform any action on the selected application on a Microsoft Windows- based platform
- ❑ Exclusively designed to protect unauthorized usage on a computer (desktop or laptop) to maintain its security and confidentiality
- ❑ Only system administrator has the privilege to set the authorization level of other users on the machine



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How Does MSS Work?

Protect s access to computing device

- It will only recognize the owner and authorized user

Protect access to application

- Could only be defined by owner and authorized user
- Only will do computer applications (copy, cut, paste) if run by owner and authorized owner

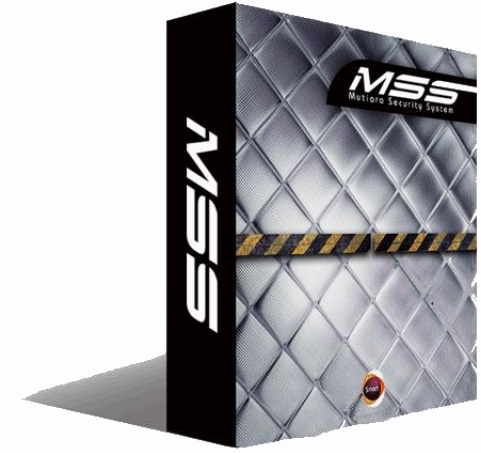
Protect access to any confidential data/ stored information

- If computer is being compromised (theft), device will not function and no longer usable



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Why Choose MSS?

❑ Easy to implement

- Use facial image as key identification, user just need to sit in front of the computer
- Computer is automatically locked and data are encrypted immediately after it cannot detect any authorized user

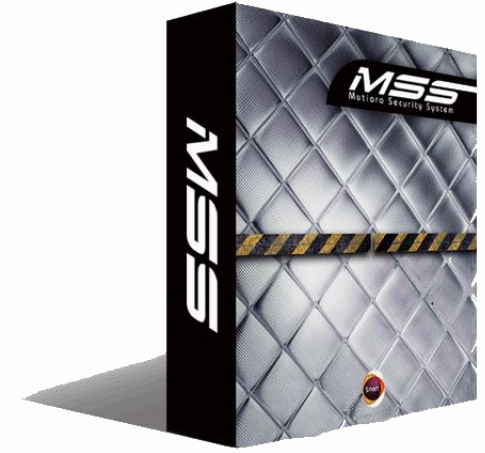
❑ Secure and reliable

- Holistic data protection even in the worst case scenario; stolen computers – data would be shredded
- Data only accessible and readable by authorized user



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Why Choose MSS?

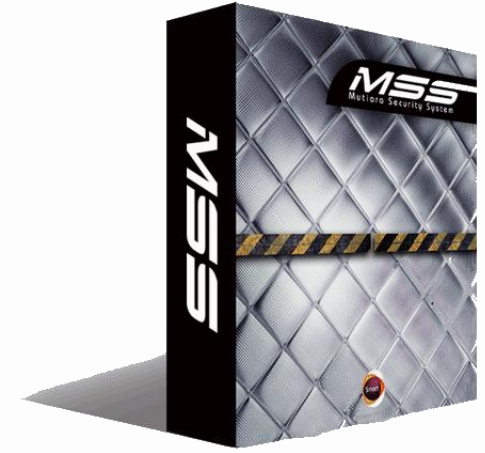
- Has layers of security to ensure the data are bulletproof from unauthorized usage**

- Flexibility**
 - The system settings can be set up or maintained by the system administrator accordingly without hassle



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MSS Key Features

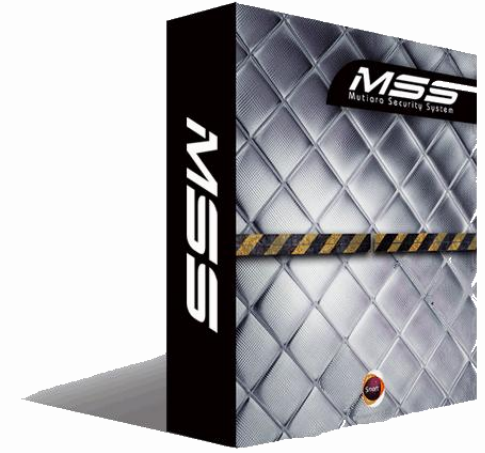
❑ Windows Application Control

- Protect access to computer – only the owner can access it
- Protect access to application – can be defined by system administrator
- Copy, cut, paste functions – only by authorized user
- If your computer is stolen
 - Device no longer usable
 - Data is save – any unauthorized attempt to access the data, data will be shredded



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MSS Key Features

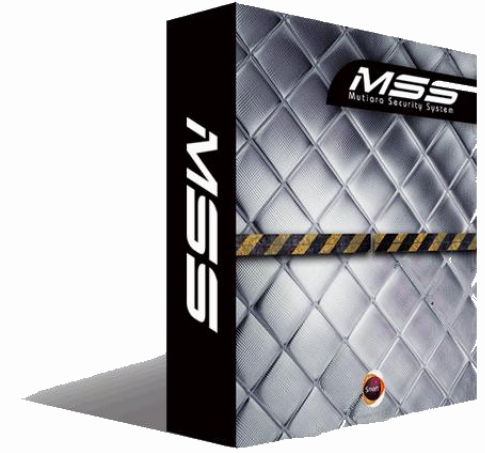
Data Encryption

- Computers are equipped with built-in data encryption
- Data is automatically encrypted to prevent unauthorized user accessing it
- Your data is only for your eyes and the user which has been granted authorization.
- Use the AES 256 bit key encryption



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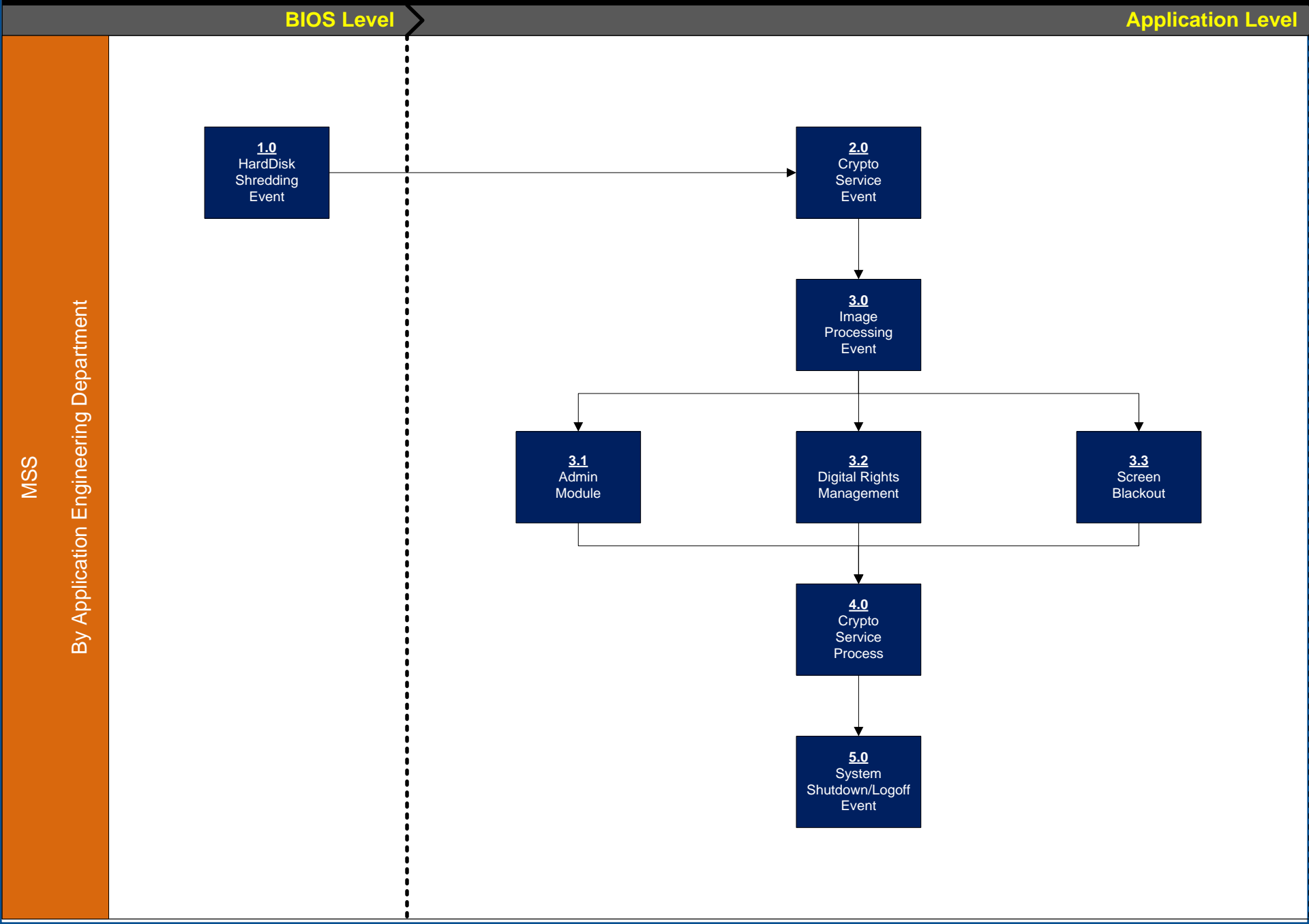


MSS Key Features

Hard Disk Shredding

- In case of stolen computer, the data is protected or shredded to ensure confidentiality and avoid leaks of the stored information
- Hard Disk Shredding is the best solution to securely obliterate the data on your hard disk

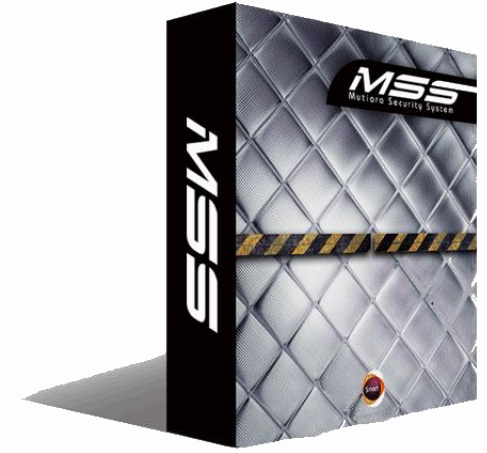
Mutiara Security System (MSS) Level 0 System Flow





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Thank You