

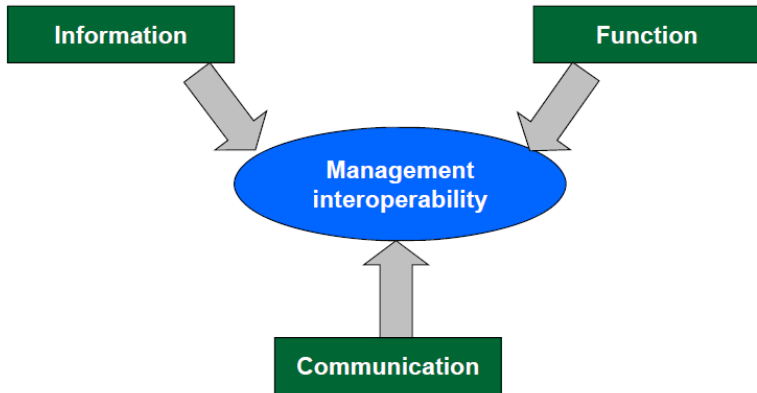
Roadmap of IoT Platforms

IoT Lab @ AUT
Amirkabir University of Technology
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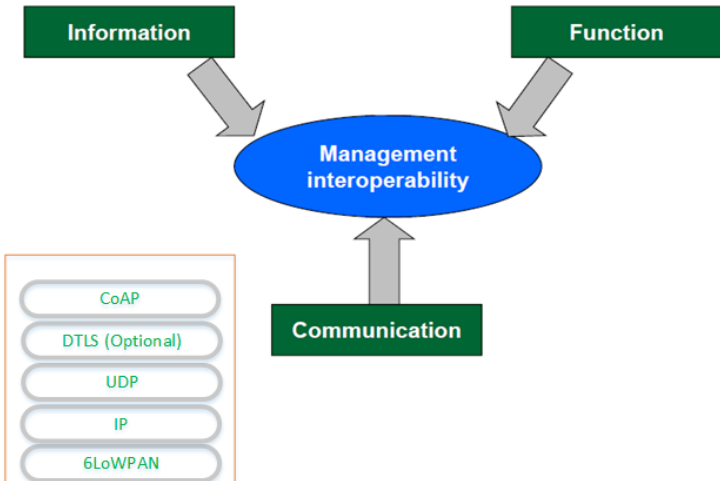
- ▶ Introduction
- ▶ Simple IoT Management Language
- ▶ Architecture
- ▶ Roadmap

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Introduction

1. Fixed Management Parameters and Functions
2. Fixed (Standard) Language to Define Parameters (and Functions)



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Simple IoT Management Language

```
{  
  ↗"id": 1,  
  ↗"type": "light",  
  ↗"variables": [  
    ↗{  
      ↗"name": "light_intensity",  
      ↗"type": "int",  
      ↗"permission": "wr"  
    ↗},  
  ↗
```

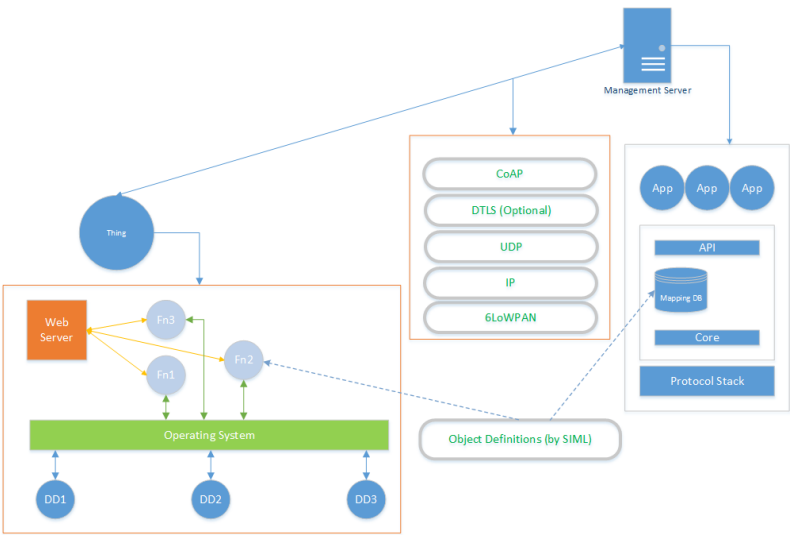
Simple IoT Management Language

```
{
  {
    "name": "reset",
    "type": "func",
    "parameters": [
      {
        {
          "name": "interval",
          "type": "int"
        }
      ]
    },
    "retrun": "void"
  }
}
```


- ▶ Flexible Management Parameters Definition
- ▶ Flexible Management Functions Definition
- ▶ Automatic Portotype Generation in Client and Server Side
- ▶ Tools to Validate Object Definitions
- ▶ ...

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Architecture



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- ▶ PoC: 2 Weeks
 - SIML Definition and Tools
 - Implement Protocol Stack
 - Implement Sample Management Server
- ▶ OS on Nodes: ???
- ▶ Implement Protocol Stack on Node: 2 Weeks
- ▶ Implement WebServer On Node: 2 Weeks
- ▶ Complete SIML Definition: 2 Weeks
- ▶ Complete SIML Tools: 2 Weeks