Software Specification Proposal

Alarm Event

**Revision History**

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| --- | --- | --- | --- |
| **Revision** | **Date** | **Notes** | **Owner** |
| 1.0 | 2018/11/20 | Software proposal for customization alarm event | Luke.Su, Dylan.Chang |
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| **Project (\*)** | Application for 東正 customize event message | **Apply Date (\*)** | 2018/11/08 |
| **Customer (\*)** | 東正 | **Business (\*)** | WISE point |
| **PM (\*)** | Kurt.Ou | **AE (\*)** | Sammy.Hsu |
| **Platform (\*)** | EIS-D210W | **OS (\*)** | Windows |
| **Peripheral** | **Name** | **Purpose** |
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|  |  |
| **User /****Functional Requirements** | **Description** | **Evaluate Solution** |
| Request for an application to fulfill customized event message from PLC | Provide an application to send customized event message  |
| Dashboard panel to show these alert messages  | Customization event message table |
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|  |  |
| **Others** |
| 1. Please do not affect existing Modbus plugin
2. PLC user manual “MANY1202A.EN\_AIRMASTER™ Q1 SOFTWARE MANUAL\_ZH(T)\_E08.pdf”
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1. **Customer’s requirement analysis**

**(\*): Must**

1. **Software Specification**

Project Scope、System Structure、System Scope、System Function、Advantech’s suggestion for Customer’s requirement.

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| **EdgeSense** * **“Alarm Event” Function:**
	1. Get ModbusHandler data from MQTT broker.
	2. To check the “Error\_Code” value as condition of sending event message.
	3. If the “Error\_Code” value is equal to error list ( modbus address (Hao updated)--CMC.xlsx ) and send an alarm event message ( EventNotify Format )to local MQTT Broker.
	4. "Alarm event" only sends event messages once if received the same "Error\_Code".
	5. RMM-Agent will retransfer event to WISE-PaaS/RMM.
 |
| * **Software Architecture:**

**Figure 1.*** **Format of Event Notify:**
* Follow the WISE-PaaS/RMM event format in JSON
* Example of Message Code: A:0030

{"susiCommData":{"commCmd":2059,"requestID":2001,"agentID":"Modbus\_Handler","handlerName":"general","sendTS":1541992952337,"eventnotify":{"subtype":"TC\_AC","msg":"Door Open","severity":4,"handler":"Modbus\_Handler","extMsg":{"n": "Warning: Enclosure door open","ErrorCode":"A:0030","eventID":242}}}}Code Type map to Advantech event Severity Level:

|  |  |
| --- | --- |
|  Code Type | Advantech Event Severity Level |
| A: Warning | Severity\_Warning ( 4 ) |
| E:Immediate stop, S: Start inhibit, R: Run inhibit | Severity\_Emergency ( 0 ) |

* **Message code & text table:**

* **Modbus’s Error Code & Message Code**

Refer to attachment “modbus address (Hao updated)--CMC.xlsx” |
| **WISE-PaaS/EdgeSense*** **Event table panel for Error code:**
	1. Panel : Base on Grafana table panel
	2. Name : Error Code Table
	3. Column : Time, Error Code, Reason.
	4. Data Source : RMM-Event-SimpleJson.

**Figure 2.** |

1. **Efforts of Software Development/Customization**

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| **Tasks** | **Comment** | **Man-days** |
| Design Architecture | Software architecture design | 2 |
| Implement – ( EdgeSense ) | Develop a service to send customization event. | 4 |
| Implement – ( WISE-PaaS ) | Develop a Grafana table panel for error code. | 8 |
| Document | Create user guide in Wiki. | 1 |
| Functional verification | QA test | 5 |
| **Total** |  | **20** |

1. **Project Management**

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| **Schedule plan (Optional)** | 20 working days after 2018/11/05 |
| **Proposal Valid** | This proposal will be valid before 2018/12/15 |
| **Expense** | WISE Point: 600 |
| **Warranty** | 6 months |
| **Attachment** | 1. modbus address (Hao updated)--CMC.xlsx,
2. MANY1202A.EN\_AIRMASTER™ Q1 SOFTWARE MANUAL\_ZH(T)\_E08.pdf
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1. **Signature**

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| --- | --- |
| **Customer:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **By (Signature):** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Name (Print):** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Title:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Address:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Tel:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **Advantech Co., Ltd.****By (Signature):** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Name(Print):** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Title:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Address**:2F., No.27, Wende Rd., Guishan Dist., Taoyuan City 333, Taiwan, R.O.C**Tel**: 886-2-2792-7818 |
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