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| **N681** | 2022/05/18 |
| **Source** | AIF-DC |
| **Title** | The MPAI Ontology V1 |
| **Target** | MPAI Members |

This document provides elements for the MPAI Ontology referenced by the MPAI-AIF Technical Specification V1, specifically, for

1. Resource Policy
2. Authentication
3. Protocol
4. Architecture
5. OS
6. OSVersion

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| **ResourcePolicy** |  |
| If “Name” == “Memory” then | {  “Name”: “Memory”  “Minimum”: int (bytes)  “Maximum”: int (bytes)  “Request”: int (bytes)  } |
| If “Name” == “CPU:Number” then | {  “Name”: “CPU:Number”  “Minimum”: int (>=0, 0 means “all”)  “Maximum”: int (>=0)  “Request”: int (>=0)  } |
| If “Name” == “CPU:Class” then | {  “Name”: “CPU:Class”  “Minimum”: enum(“Low”, “Medium”, “High”)  “Maximum”: enum(“Low”, “Medium”, “High”)  “Request”: enum(“Low”, “Medium”, “High”)  } |
| If “Name” == “GPU:Number” then | {  “Name”: “GPU:Number”  “Minimum”: int (>=0, 0 means “all”)  “Maximum”: int (>=0)  “Request”: int (>=0)  } |
| If “Name” == “GPU:CUDA:Class” then | {  “Name”: “GPU:CUDA:Class”  “Minimum”: enum(“SM10”, “SM11”, “SM12”, “SM13”, “SM20”, “SM21”, “SM30”, “SM32”, “SM35”, “SM37”, “SM50”, “SM52”, “SM53”, “SM60”, “SM61”, “SM62”, “SM70”, “SM72”, “SM75”, “SM80”, “SM86”, “SM87”, “SM90”)  “Maximum”: enum(“SM10”, “SM11”, “SM12”, “SM13”, “SM20”, “SM21”, “SM30”, “SM32”, “SM35”, “SM37”, “SM50”, “SM52”, “SM53”, “SM60”, “SM61”, “SM62”, “SM70”, “SM72”, “SM75”, “SM80”, “SM86”, “SM87”, “SM90”)  “Request”: enum(“SM10”, “SM11”, “SM12”, “SM13”, “SM20”, “SM21”, “SM30”, “SM32”, “SM35”, “SM37”, “SM50”, “SM52”, “SM53”, “SM60”, “SM61”, “SM62”, “SM70”, “SM72”, “SM75”, “SM80”, “SM86”, “SM87”, “SM90”)  } |
| If “Name” == “GPU:CUDA:FrameBuffer” then | {  “Name”: “GPU:CUDA:FrameBuffer”  “Minimum”: float “GB\_” enum(“GDDR”, “GDDR2”, “GDDR3”, “GDDR4”, “GDDR5”, “GDDR5X”, “GDDR6”, “GDDR6X”)  “Maximum”: float “GB\_” enum(“GDDR”, “GDDR2”, “GDDR3”, “GDDR4”, “GDDR5”, “GDDR5X”, “GDDR6”, “GDDR6X”)  “Request”: float “GB\_” enum(“GDDR”, “GDDR2”, “GDDR3”, “GDDR4”, “GDDR5”, “GDDR5X”, “GDDR6”, “GDDR6X”)  } |
| If “Name” == “GPU:CUDA:MemorySpeed” then | {  “Name”: “GPU:CUDA:MemorySpeed”  “Minimum”: float “GHz”  “Maximum”: float “GHz”  “Request”: float “GHz”  } |
| **Authentication** | enum(“Token Authentication”, “Certificate-based Authentication”, “Password-based Authentication”) |
| **Protocol** | enum(“UDP”, “TCP”, “HTTP”, “HTTPS”, “CoAP”, “CoAPS”, “L2CAP”, “BNEP”, “RFCOMM”, “SDP”, “RPC”, “RTP”, “RTCP”) |
| **Architecture** | enum(“x86”, “x86-64”, “ARM”, “ARM64”, “MIPS”, “RISC-V”) |
| **OS** | enum(“Windows”, “MacOS”, “Linux”, “Android”, “Zephyr”, “RTOS”, “Oniro”, “iOS”) |
| **OSVersion** | {  “MinimumOSver”: string  ) |