|  |  |
| --- | --- |
|  | Moving Picture, Audio and Data Coding by Artificial Intelligencewww.mpai.community |

|  |  |
| --- | --- |
| **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

|  |  |
| --- | --- |
| **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) |