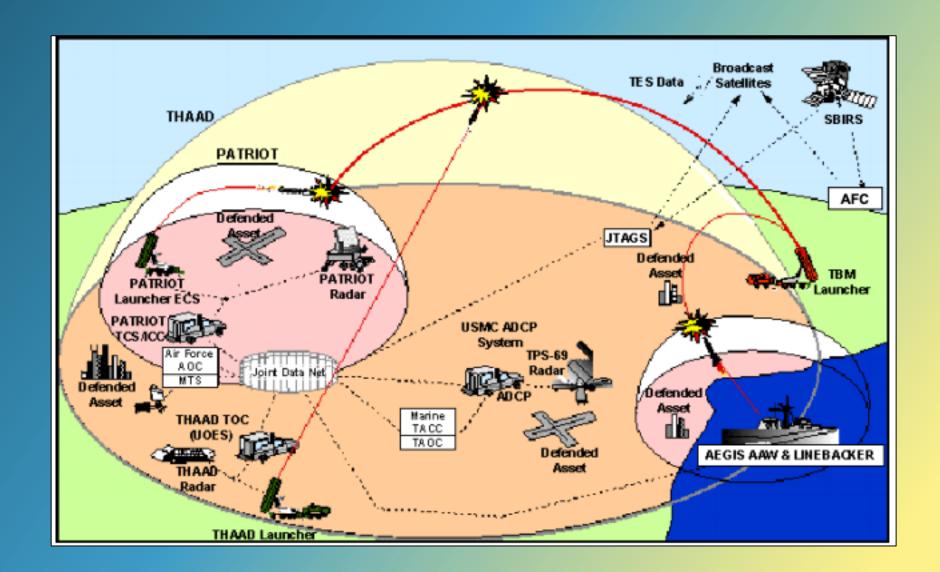
# OK, try it now...

Tram Chase SimVentions, Inc. 28 Jan 2010

#### 





#### **Document-centric approach**

IEEE Std 1278.1-1995 (Revision of IEEE Std 1278-1993)

### IEEE Standard for Distributed Interactive Simulation – Application Protocols

Sponso

Standards Committee on Interactive Simulation (SCIS of the

**IEEE Computer Society** 

Approved September 21, 1995

IEEE Standards Board

Abstract: Data messages, known as protocol data units in etwork between simulation applications are defined. These place within specified domains called protocol families, which tion, Warfare, Logistics, Simulation Management, Distributed Communications.

Keywords: Data messages, protocol data units (PDUs), Distrilation petwork

The Institute of Electrical and Electronics Engineers, Inc. 345 East 47th Street, New York, NY 10017-2394, USA

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VITA
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URL: http://www.vita.com

Approved American National Standard

ANSI/VITA 65-2010 (R2012) OpenVPX™ System Specification

#### Abstract

The OpenVPX System Specification was created to bring versatile system architectural solutions to the VPX market. Based on the extremely flexible VPX family of standards the OpenVPX standard uses module mechanical, connectors, thermal, communications protocols utility, and power definitions provided by specific VPX standards and then describes a series of standard profiles that define slots, backplanes, modules, and Standard Development Chassis.



Approved February 2012
American National Standards Institute, Inc.

Promotes stove-piped manual workflows that must be repeated

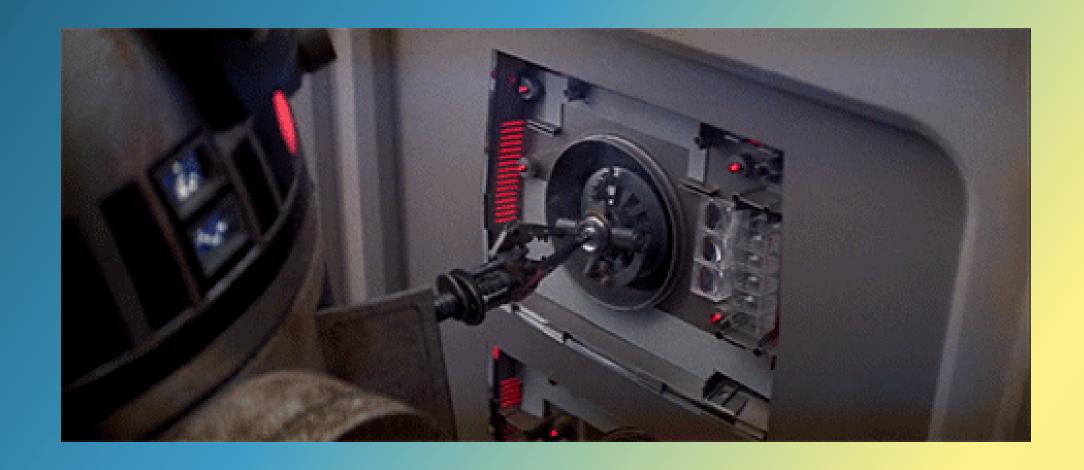
Impedes the ability to rapidly answer questions

Data is all over the place

Increased likelihood of error

## 





#### Data-centric approach

```
"type" : ""
"power5vInAmps" : 8.0,
'power3_3vInAmps" : 4.0,
'power3_3vAuxInAmps" : 0.0,
 powerTotalInWatts": 53.2,
       "protocol" : "Ethernet",
                             ___ _id
                                                               ObjectId("5ba9214b1d459627f868...
                                                                                                    ObjectId
       "portQuantity" : 2
       gbaudRateInGBd":
                          imageData
                                                               [ 0 elements ]
                                                                                                     Array
       "pipeSize" : "FP"
                                                               [ 2 elements ]
                          topology
                                                                                                     Array

    editable

                                                               false
                                                                                                    Boolean
"controlPlanes" : [
                            deletable
                                                               false
                                                                                                    Boolean
       "protocol" : "1000BAS
                          documentation
                                                               [ 0 elements ]
                                                                                                    Array
                            ownerld
                                                               5d5eb42aa7596f9d52f6ff52
                                                                                                     String
                            worldAccess
                                                               ReadWrite
                                                                                                    String
       "pipeSize" : "UTP"
                          groupAccess
                                                               [ 0 elements ]
                                                                                                    Array
                          userAccess
                                                               [ 0 elements ]
                                                                                                     Array
"expansionPlanes" : [],
                             vendor
                                                               Vendor A
                                                                                                     String
"mezzanineSlots" : [
                            "" model
                                                               3U PAY 16.2.3-5
                                                                                                    String
                            partNumber
                                                                                                    String
                             "" seriesNumber
                                                                                                    String
                            revisionNumber
                                                                                                    String
                             manufacturedDate
                                                               2017-02-08 00:00:00.000Z
                                                                                                    Date
                            "" type
                                                               Payload
                                                                                                    String
       "interfacePowerInter
                            "" form
                                                               3U
                                                                                                    String
                          moduleProfile
                                                               [ 2 elements ]
"ports" : [
                                                                                                     Array
                                                               SLT3-PAY-2F2U-14.2.3
                             slotProfile
                                                                                                    String
       "type" : "PCIe",
       "version" : "Gen 2"
                          processors
                                                               [ 2 elements ]
                                                                                                    Array
                                                               [ 3 elements ]
                          memory
                                                                                                    Array
                             power5vlnAmps
                                                               8.0
                                                                                                    Double
                             ## power3_3vInAmps
                                                               4.0
                                                                                                    Double
                                                               0.0
                             ## power3_3vAuxInAmps
                                                                                                    Double
                             ## powerTotalInWatts
                                                               53.2
                                                                                                    Double
                                dataPlanes
                                                               [1 element]
                                                                                                    Array
                            controlPlanes
                                                               [1 element]
                                                                                                     Arrav
```

- Repositories for searching and comparing
- Document generation
- Modeling, analysis, and simulation
- Automation
- Faster results

OK, try this now...

Collaborate

Data model / taxonomy definition

Ecosystem – tools, repositories, data exchange