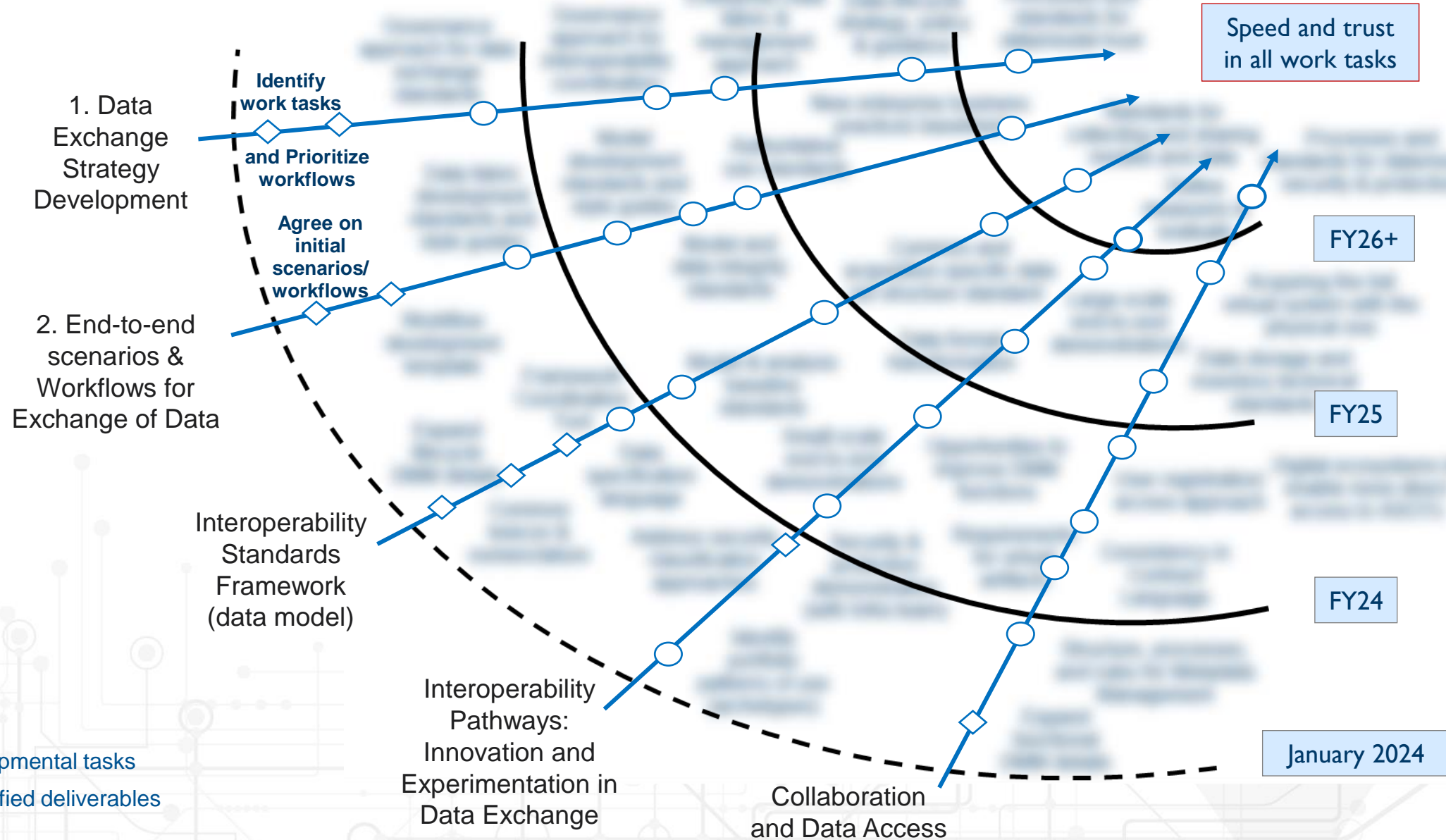# Data Evening Session

Data Evening Session Agenda

- **Intro/Welcome** – Ms. Phil Zimmerman (5 mins)

- **Evening Kickoff** – Col Quigley (10 mins)

- **Stage setting and Introducing Breakout Sessions** – LtCol Pospisal and Dean Bucher/Tom McDermott (15 mins)

- **Working Session and networking break** (detailed agenda: chart 5) (140 min)

- **Closing Comments** – Col Quigley (10 minutes)

Draft "Structure and Secure Data" Roadmap

Speed and trust in all work tasks

1. Data Exchange Strategy Development

Identify work tasks and Prioritize workflows

Agree on initial scenarios/ workflows

2. End-to-end scenarios & Workflows for Exchange of Data

Interoperability Standards Framework (data model)

Interoperability Pathways: Innovation and Experimentation in Data Exchange

Collaboration and Data Access

FY26+

FY25

FY24

January 2024

○ Primary developmental tasks
◇ Currently identified deliverables

DMM: An Accelerate Future State

Lifecycle DMM

Invention

Systems Engineering and Requirements Decomposition

Performance Modeling and Design

Test and Performance Verification

Production

Product Support Data Cataloging

Sustainment

Modifications

Installation and Mission Support

[DMM: An Accelerated Future State Whitepaper](#)

An Accelerated Future State

Mr. J. Kyle Hurst
Dr. Steven A. Turek
Col. Chadwick M. Steipp
Gen. Duke Z. Richardson

Separate Gov't & Industry Tables

Invention

Systems Engineering and
Requirements Decomposition

Performance Modeling and
Design

Test and Performance Verification

Production

Product Support Data Cataloging

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Modifications

Installation and Mission Support

1. **Ideate on user stories in *government-industry data exchange/access* in your assigned area from your gov or industry perspective**
(50 mins)

2. **Prioritize top 3-5 issues that *can be addressed through the IAC* at your table**
(10 mins)

3. **BREAK and data collection/processing**
(30 mins)

4. **Guidance and Constraint session for top 3 issues per area (same 3 for gov & industry tables)**
(50 mins)

DTO

EXAMPLE internal user story
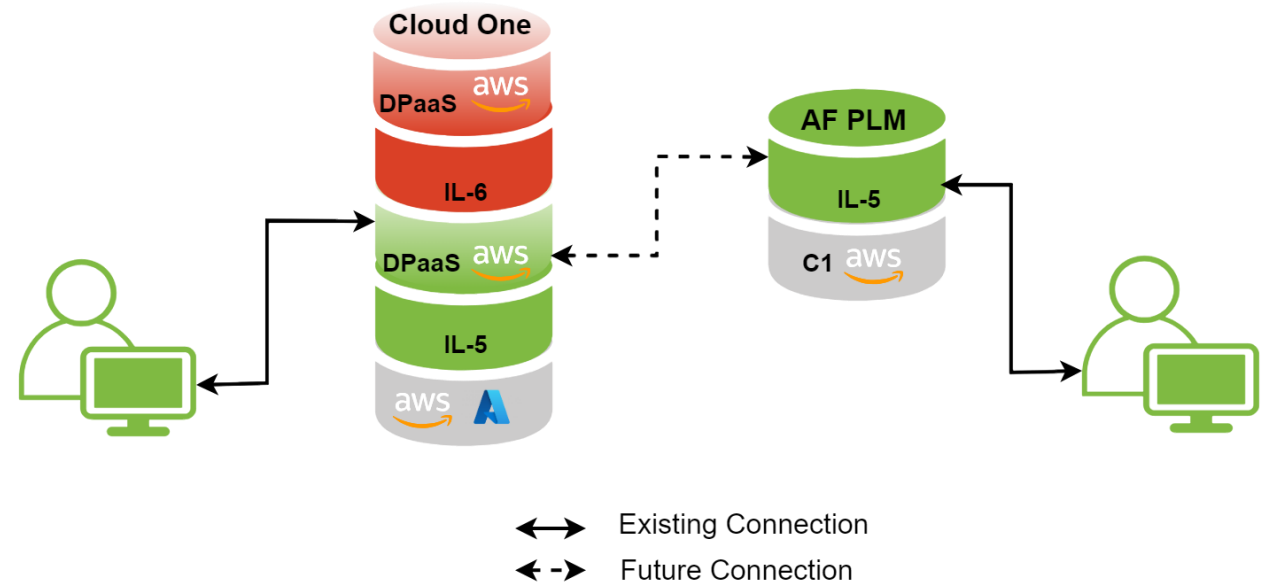
AF PLM Teamcenter Access

User Story

As a program engineer, I want to access authoritative CAD models from my digital engineering virtual desktop, so that they can be reviewed against the system architecture models.

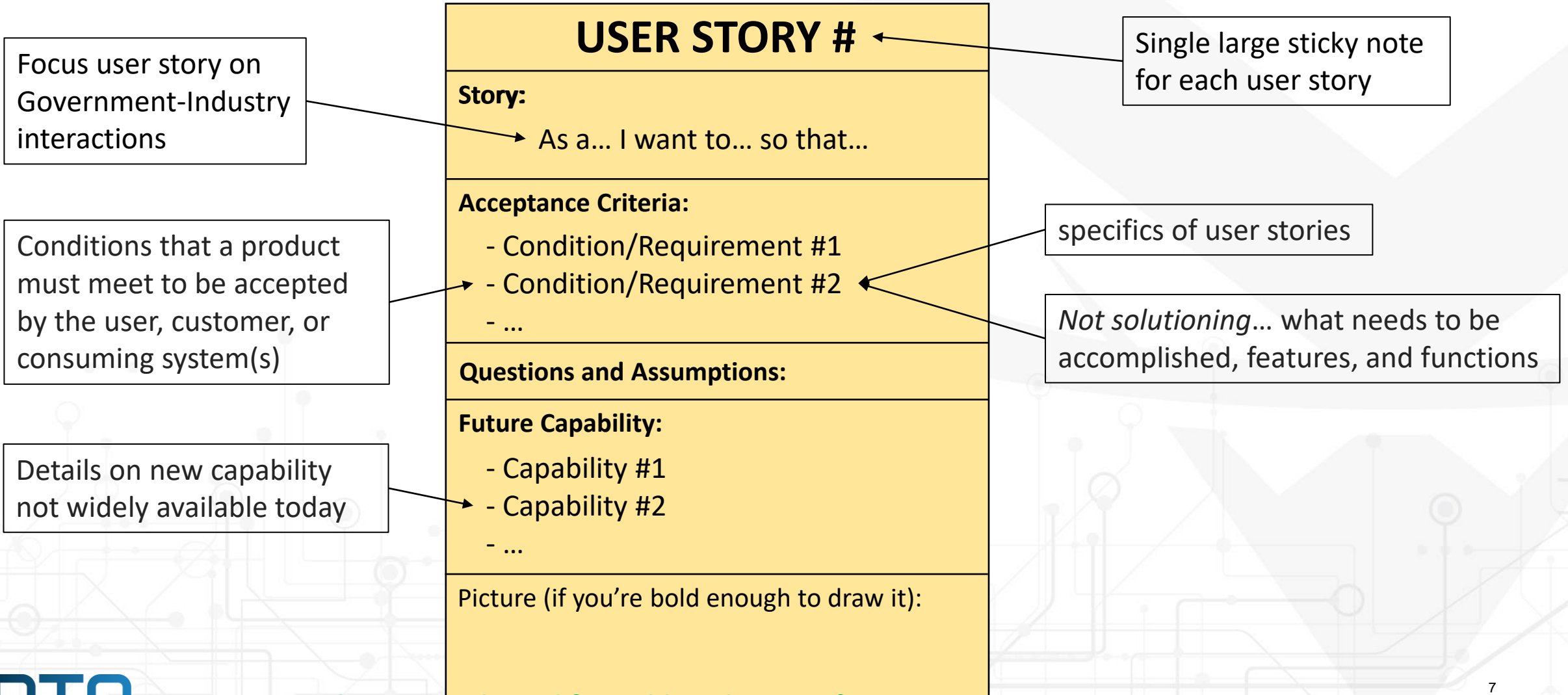### Acceptance Criteria

The program engineer:
- Can access DPaaS virtual desktop
- Access system architecture model in SysML application on DPaaS virtual desktop
- Access CAD viewer software on DPaaS virtual desktop
- Navigate to selected CAD file in AF PLM repository
- View CAD model on DPaaS virtual desktop
- Compare CAD model to system architecture model

Future Capabilities

- AF PLM user logged directly into AF PLM can access data, such as SysML models, in DPaaS to upload to PLM
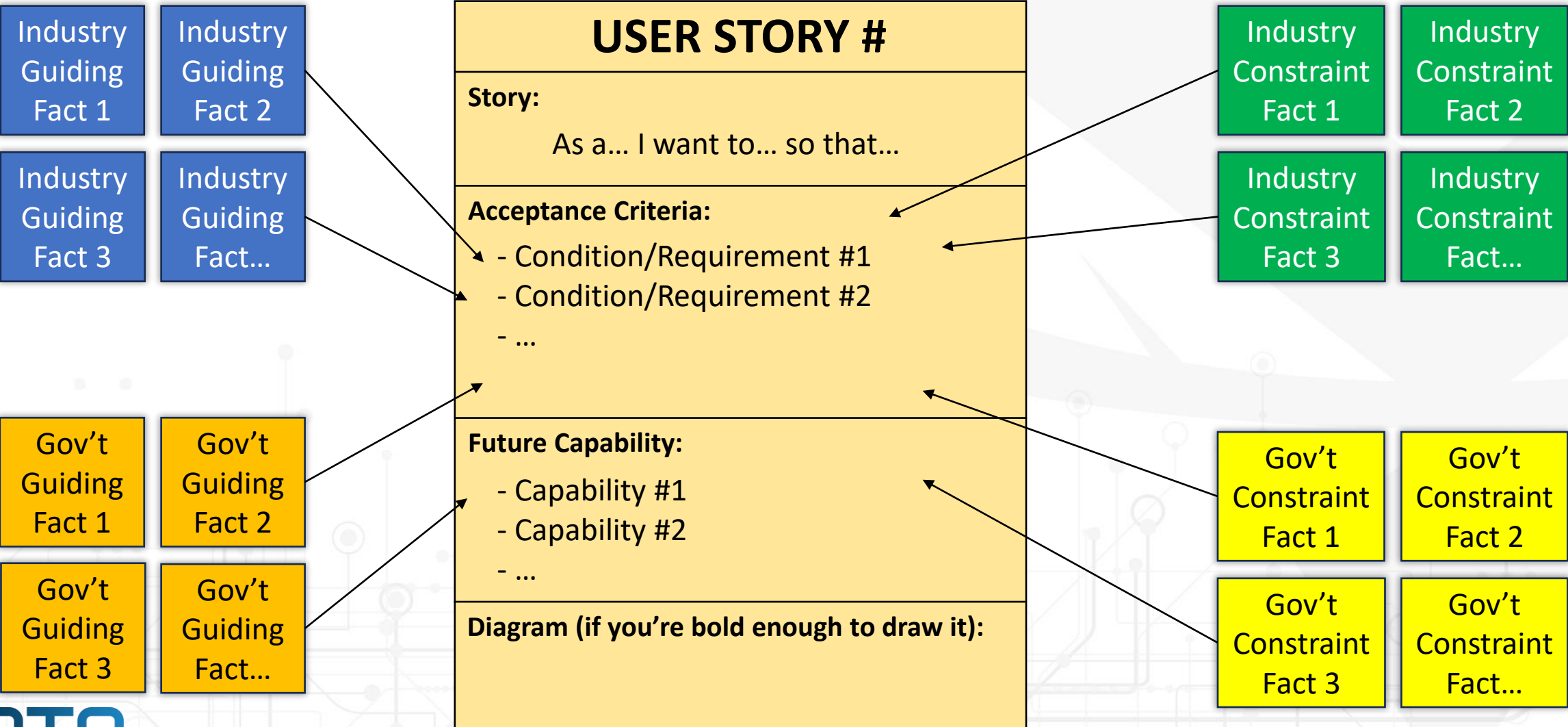- Automated comparison of CAD model to system architecture model

Government-Industry Data Exchange User Story Development

Focus user story on Government-Industry interactions

USER STORY #

Single large sticky note for each user story

Story:

As a... I want to... so that...

Acceptance Criteria:

- Condition/Requirement #1
- Condition/Requirement #2
- ...

specifics of user stories

Conditions that a product must meet to be accepted by the user, customer, or consuming system(s)

Not solutioning... what needs to be accomplished, features, and functions

Questions and Assumptions:

Future Capability:

- Capability #1
- Capability #2
- ...

Details on new capability not widely available today

Picture (if you're bold enough to draw it):

DTO

30 Minute Break

- **Facilitators come to the front to share/document results**

- **Organize results, remove redundancies, and plan assignments for the next breakout session**

DTO

Guiding and Constraining Considerations

Industry Guiding Fact 1	Industry Guiding Fact 2	
Industry Guiding Fact 3	Industry Guiding Fact...	

USER STORY #

Story:

As a... I want to... so that...

Acceptance Criteria:

- Condition/Requirement #1
- Condition/Requirement #2
- ...

Future Capability:

- Capability #1
- Capability #2
- ...

Diagram (if you're bold enough to draw it):

Industry Constraint Fact 1	Industry Constraint Fact 2
Industry Constraint Fact 3	Industry Constraint Fact...

Gov't Guiding Fact 1	Gov't Guiding Fact 2
Gov't Guiding Fact 3	Gov't Guiding Fact...

Gov't Constraint Fact 1	Gov't Constraint Fact 2
Gov't Constraint Fact 3	Gov't Constraint Fact...

DTO

EXAMPLE internal user story

AF PLM Teamcenter Access

User Story

As a program engineer, I want to access authori[zed] CAD models from my digital engineering virtual desktop, so that they can be reviewed against the system architecture models.

Acceptance Criteria

The program engineer:
- Can access DPaaS virtual desktop
- Access system architecture model in SysML applicati[on] DPaaS virtual desktop
- Access CAD viewer software on DPaaS virtual deskt[op]
- Navigate to selected CAD file in AF PLM repository
- View CAD model on DPaaS virtual desktop
- Compare CAD model to system architecture model

Common data model in work

Published roadmap shows timeframes for PLM capability

Cloud One

DPaaS — aws
IL-6
DPaaS — aws
IL-5
aws A

AF PLM
IL-5
C1 aws

↔ Existing Connection
←-→ Future Connection
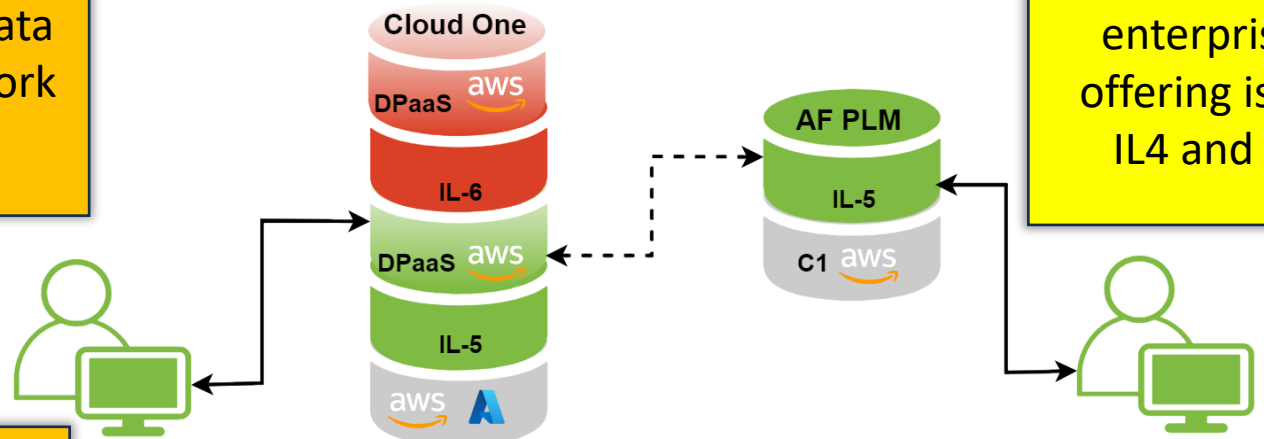
Teamcenter Is DAF PLM tool of choice

Current enterprise offering is at IL4 and 5

DPaaS and AF PLM both use CAC credentialing

Future Capabilities

- AF PLM user logged directly into AF PLM can access data, such as SysML models, in DPaaS to upload to PLM
- Automated comparison of CAD model to system architecture model

IDE Evening Session

IDE Evening Session Agenda

- **Intro/Welcome** – Phil Zimmerman (5 mins)

- **Evening Kickoff** – Col Quigley (10 mins)

- **Stage setting and Introducing Breakout Sessions** – Kyle Hurst and Vicky O'Sullivan (15 mins)

- **Use Case Development** – All tables working independently *with* facilitator (45 minutes)

- **Prioritize Top 3 use cases for further definition and detailing** – All tables (15 minutes)

- **BREAK** and data collection/processing (30 minutes)

- **Add details to Guide and Constrain each use case** – All tables (50 minutes)

- **Closing Comments** – Vicky, Kyle, Col Q (10 minutes)

DTO

Draft SAP IT IDE Roadmap
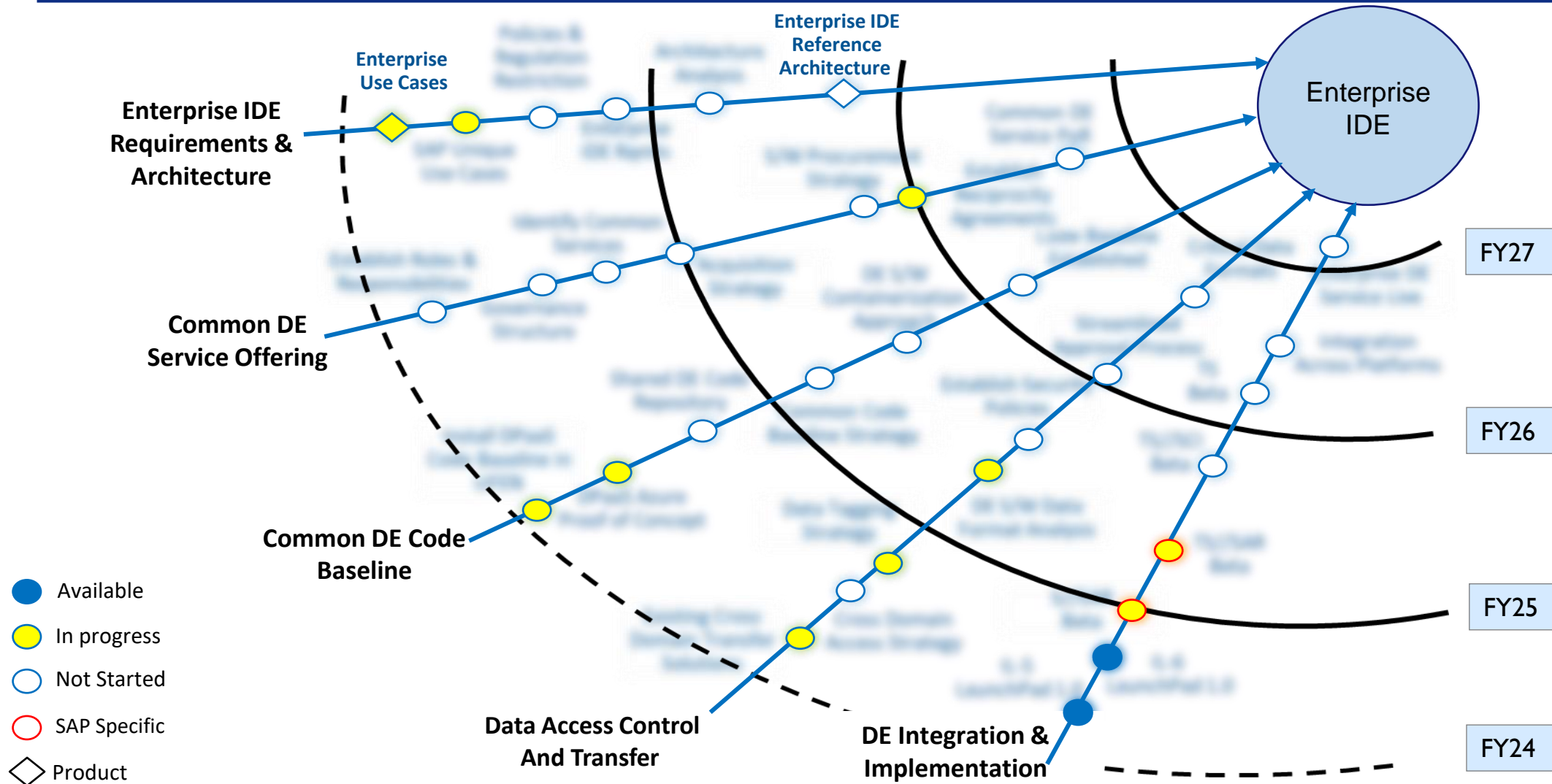
IAC Kickoff Results/Stage Setter

Breakout 1 - Ideation

1. Define high value use cases/business cases (personal/functional/phase of the lifecycle)
2. Pilot use cases
3. Develop common taxonomy/language (functionally broken down)
4. Identify policy regarding environments (inhibitors/roadblocks)
5. Artifact translations – what's the new things I need to ingest into my environment
6. Data standards/sharing RoEs
7. Tool Integration/common formats (not standards....)
8. What interfaces into gov't environments (need commonality)
9. Data Tagging for enterprise data repository
10. Defining prioritized list of CDRLs to update
11. Trust for data sharing – what does gov't and industry need to see in an environment to feel comfortable on IP
12. Data services standards (min standards we need to start – "what is it we are trying to share")
13. Study/position paper for how industry protects their IP (feed towards what would industry need to see from an environment to feel comfortable sharing)
14. Plan to monetize R&D strategies
15. SysML v1 to v2 transition plan
16. Standards that are relevant selection/listing
17. Process flow industry can follow
18. Wide reaching sandbox environment for all of us
19. End goal in mind – collective definition of the end state and what data we need to get there
20. Curate list of existing *things* we can scale/leverage (to include outside DoD and DIB)
21. Capture/agree on "what" and "why" (tie to use cases and taxonomy ones above)
22. Educate/communicate the "why"
23. Defining set of shared and flexible requirements for environments prior to ATO
24. Collectively defined reference architecture for IDEs
25. Draft a Service Level Agreement for IDEs

DTO

Session 1
DMM Infrastructure and Environment

Select your top 3 priorities for working groups
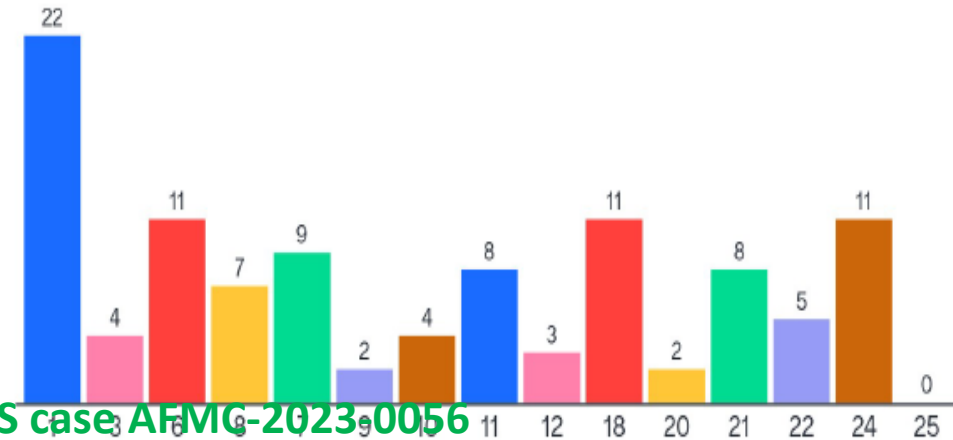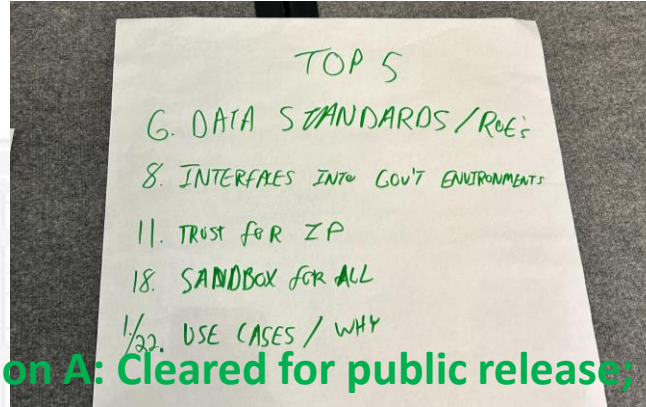
TOP 5
6. DATA STANDARDS/RoE's
8. INTERFACES INTO GOV'T ENVIRONMENTS
11. TRUST FOR IP
18. SANDBOX FOR ALL
1/22. USE CASES / WHY

Focus Areas for This Evening

1. Define high value use cases/business cases (personal/functional/phase of the lifecycle)

2. Pilot use cases

3. Develop common taxonomy/language (functionally broken down)

4. Identify policy regarding environments (inhibitors/roadblocks)

5. Artifact translations – what's the new things I need to ingest into my environment

6. Data standards/sharing RoEs

7. Tool Integration/common formats (not standards....)

8. What interfaces into gov't environments (need commonality)

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DTO

Facilitated Breakouts

Invention

Systems Engineering and
Requirements Decomposition

Performance Modeling and
Design

Test and Performance Verification
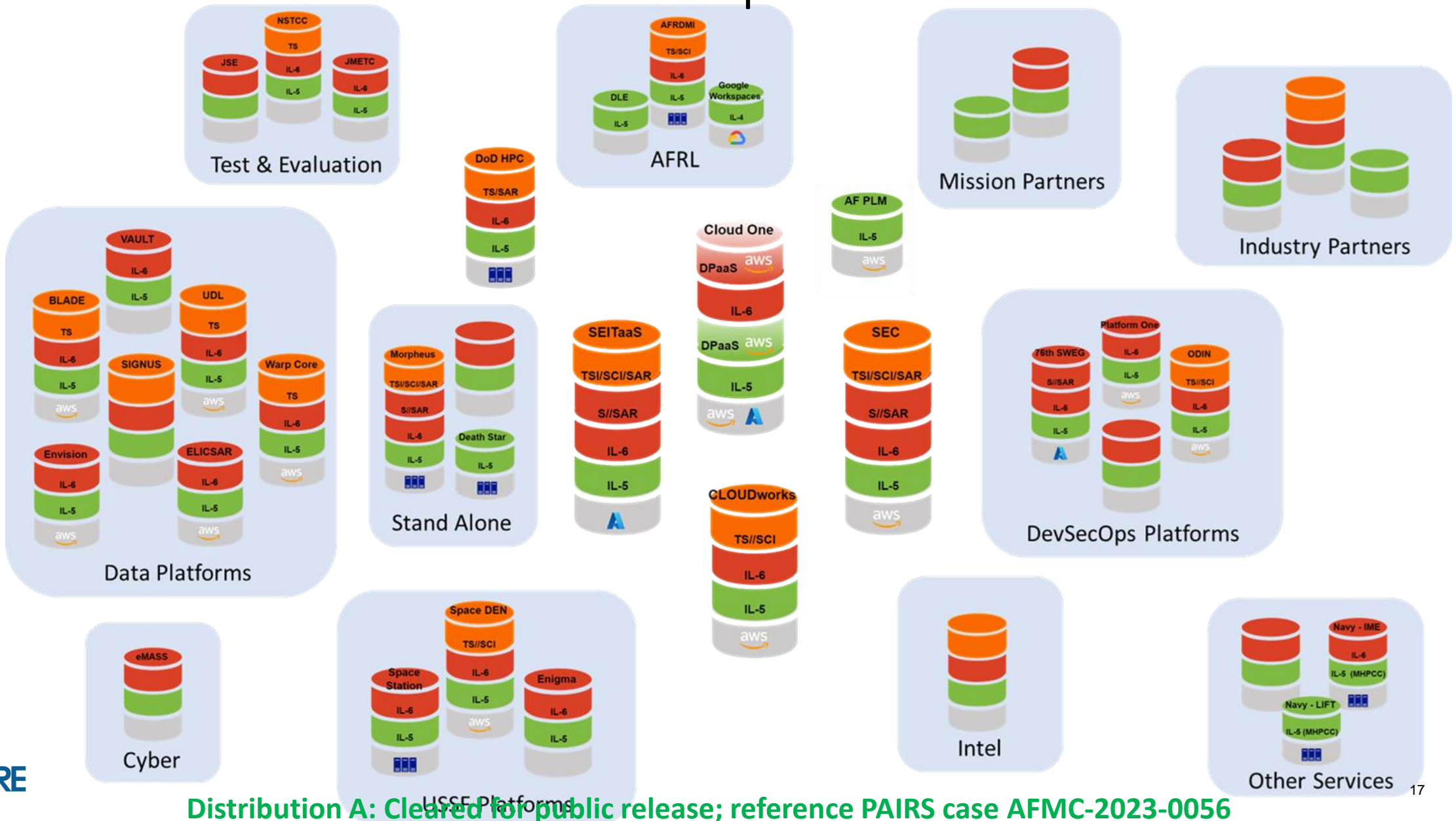
Production

Product Support Data Cataloging

Sustainment

Modifications

Installation and Mission Support

1. **Ideate on user stories in _government-industry data exchange_ in _your assigned area_ from your gov or industry perspective**
(50 mins)

2. **Prioritize top 5 issues that _can be addressed through the IAC_ at your table**
(10 mins)

3. **BREAK and data collection/processing**
(30 mins)

4. **Guidance and Constraint session for top 3 issues per area (same 3 for gov & industry tables)**
(50 mins)

DTO

As-Is Enterprise IDE

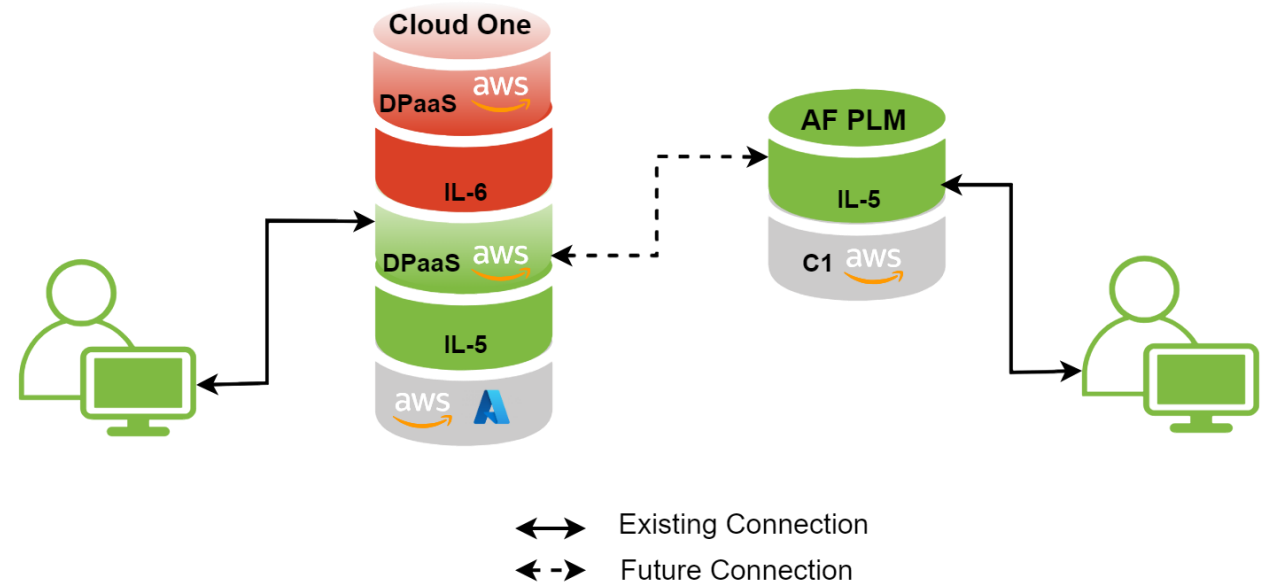# EXAMPLE internal user story

AF PLM Teamcenter Access

User Story

As a program engineer, I want to access authoritative CAD models from my digital engineering virtual desktop, so that they can be reviewed against the system architecture models.

Acceptance Criteria

The program engineer:
- Can access DPaaS virtual desktop
- Access system architecture model in SysML application on DPaaS virtual desktop
- Access CAD viewer software on DPaaS virtual desktop
- Navigate to selected CAD file in AF PLM repository
- View CAD model on DPaaS virtual desktop
- Compare CAD model to system architecture model

Future Capabilities

- AF PLM user logged directly into AF PLM can access data, such as SysML models, in DPaaS to upload to PLM

- Automated comparison of CAD model to system architecture model

# EXAMPLE internal user story

DoD HPC User Access

User Story

As a program engineer, I want to develop and execute an AFSIM scenario, at IL-5 and IL-6, based on architecture and requirement data in a DoD High Powered Computing (HPC), so that I can export the simulation results to analyze on my digital engineering desktop as the appropriate classification level .

Acceptance Criteria

The program engineer:
- Can access DPaaS virtual desktop
- Access system architecture & requirement models
- Access DoD HPC from DPaaS virtual desktop
- Develop and execute Advance Framework for Simulation, Integration, and Modeling (AFSIM) scenario in DoD HPC
- Export simulation results
- Open simulation results in DPaaS virtual desktop for analysis
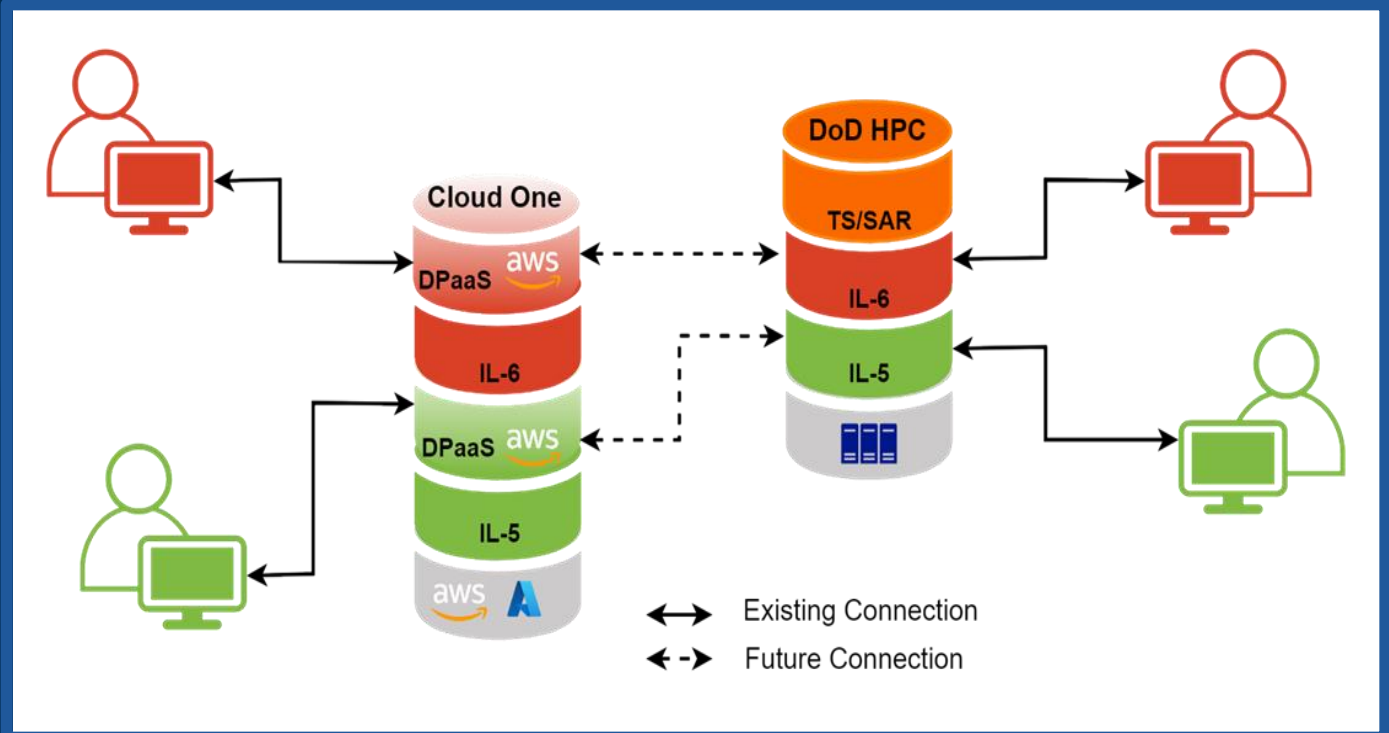
Future Capabilities

- Implementation of an integrated tool chain across DE tools within DPaaS and the DoD HPCs – example use of Phoenix Model Center to automate execution of engineering analysis across tools running in DPaaS and the DoD HPCs

EXAMPLE internal user story

Industry Partners

User Story

As the program data manager, I want to be able to accept SysML model deliveries from industry partners, so that the models are available to program engineers to review from the Gov't digital engineering virtual desktop.

Acceptance Criteria

The industry partner:
- Can upload a SysML model to meet a CDRL delivery from the vendor IDE to the Gov't DPaaS data repository
  - DPaaS repository performs a security scan
- Send notification to Gov't program data manager of delivery

The program data manager:
- Can access Cloud One Digital Platform as a Service (DPaaS) virtual desktop
- Receives notification on DPaaS virtual desktop of data delivery
- Can access CDRL delivery DPaaS data repository
- Can upload the CDRL SysML model to the SysML modeling tool in DPaaS
- Notify program engineers model is available for review
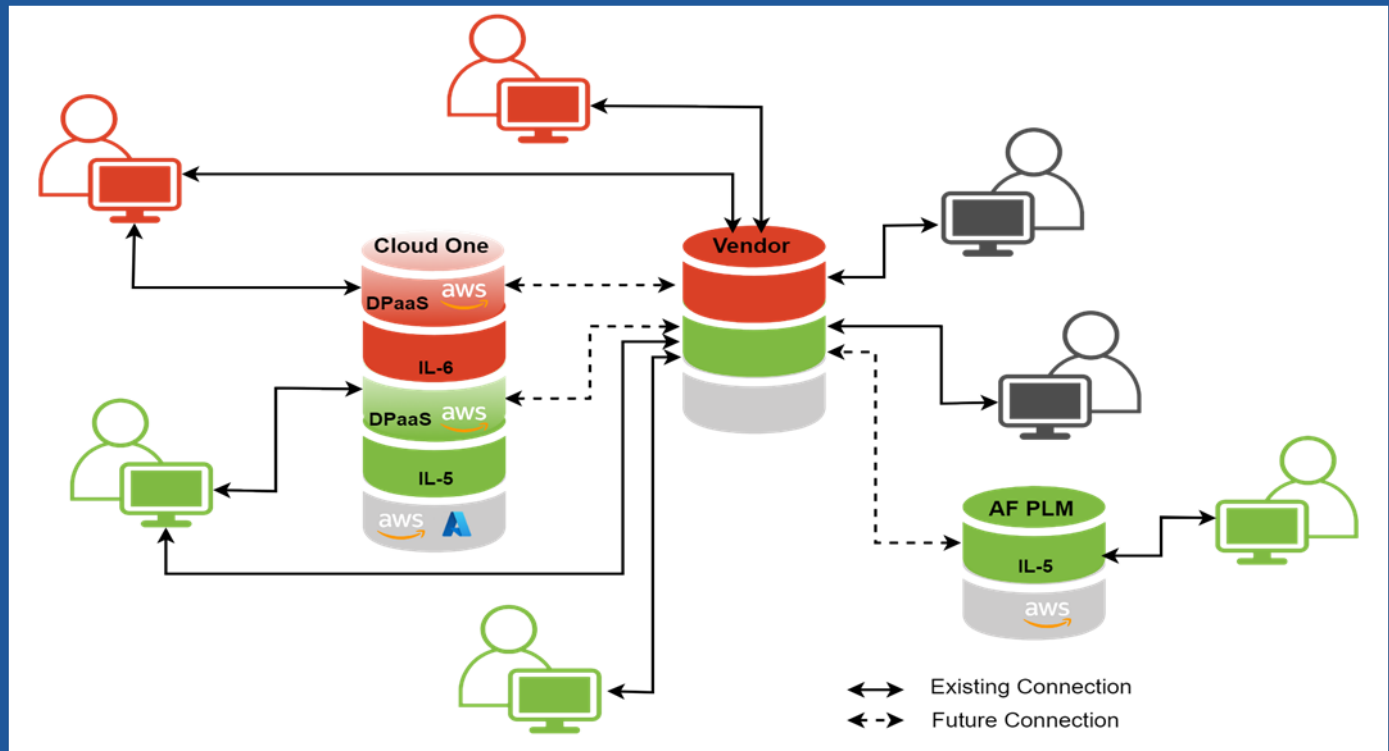
Future Capabilities

- Direct delivery of models from the Vendors IDE to a program's AF PLM environment

Government-Industry User Story Development

Focus user story on Government-Industry interactions

Single large sticky note for each user story

USER STORY

Story:

As a… I want to… so that…

Acceptance Criteria:

- Condition/Requirement #1
- Condition/Requirement #2
- …

specifics of user stories

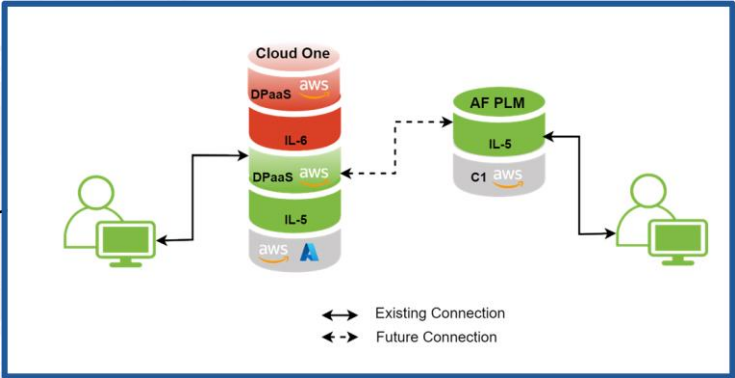Conditions that a product must meet to be accepted by the user, customer, or consuming system(s)

Not solutioning… what needs to be accomplished, features, and functions

Questions and Assumptions:

Future Capability:

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- Capability #2
- …

Details on new capability not widely available today

Diagram (if you're bold enough to draw it):

DTO

30 Minute Break

- **Facilitators come to the front to share/document results**
- **Organize results, remove redundancies, and plan assignments for the next breakout session**

Guiding and Constraining Considerations

Guiding Fact 1

Guiding Fact 2

Industry Guiding Fact 3

Industry Guiding Fact 4

Guiding Fact 5

Guiding Fact 6

Guiding Fact 7

Guiding Fact...

USER STORY #

Story:

As a... I want to... so that...

Acceptance Criteria:

- Condition/Requirement #1
- Condition/Requirement #2
- ...

Future Capability:

- Capability #1
- Capability #2
- ...

Diagram (if you're bold enough to draw it):

Constraint Fact 1

Constraint Fact 2

Industry Constraint Fact 3

Industry Constraint Fact 4

Constraint Fact 5

Constraint Fact 6

Constraint Fact 7

Constraint Fact...

DTO

EXAMPLE internal user story

Teamcenter Is DAF PLM tool of choice

AF PLM Teamcenter Access

User Story

As a program engineer, I want to access author...
CAD models from my digital engineering virtual desktop,
so that they can be reviewed against the system
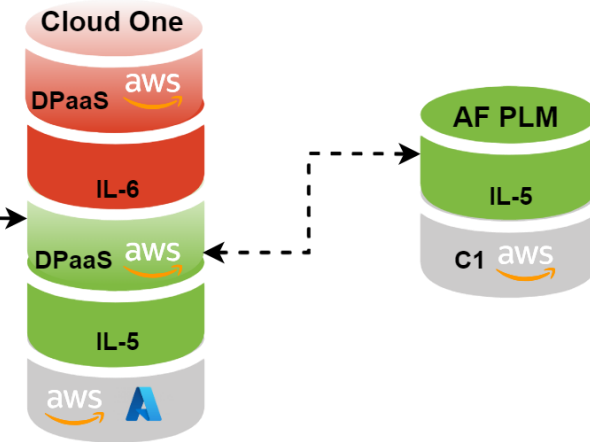architecture models.

Acceptance Criteria

The program engineer:
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- Access system architecture model in SysML applicati...
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- Access CAD viewer software on DPaaS virtual deskt...
- Navigate to selected CAD file in AF PLM repository
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DPaaS and AF PLM both use CAC credentialing

Cloud One
DPaaS aws
IL-6
DPaaS aws
IL-5
aws A

AF PLM
IL-5
C1 aws

↔ Existing Connection
←-→ Future Connection

Future Capabilities

- AF PLM user logged directly into AF PLM can access data, such as SysML models, in DPaaS to upload to PLM
- Automated comparison of CAD model to system architecture model