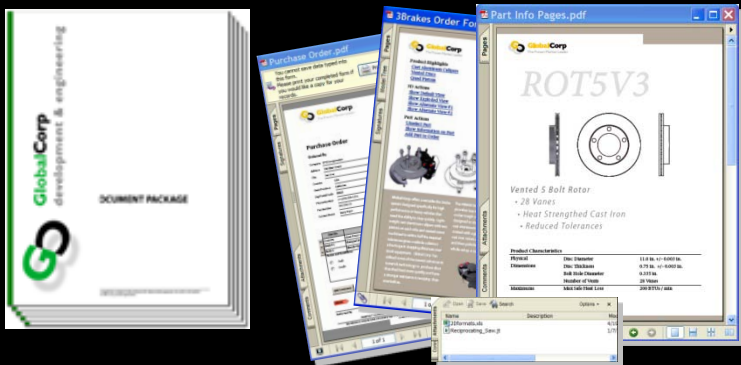


Adobe LiveCycle ES PDF Generator 3D Overview

Automate the creation and
assembly of Adobe PDF files
from Engineering Product Data

Pierre Tager
Product Manager, 3D/Mfg
Nov 11, 2008





Combine and structure documents

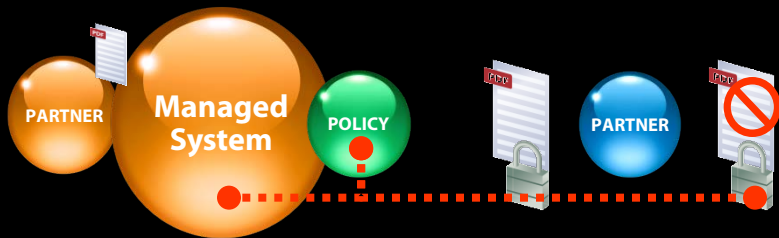
Automate document production and distribution

Capture data, push and pull information with customized e-forms

Protect IP and control design information version

Mark-up, annotate, sign, save, submit forms

Orchestrate processes beyond the firewall



LiveCycle ES is a platform

Cross-Platform Clients

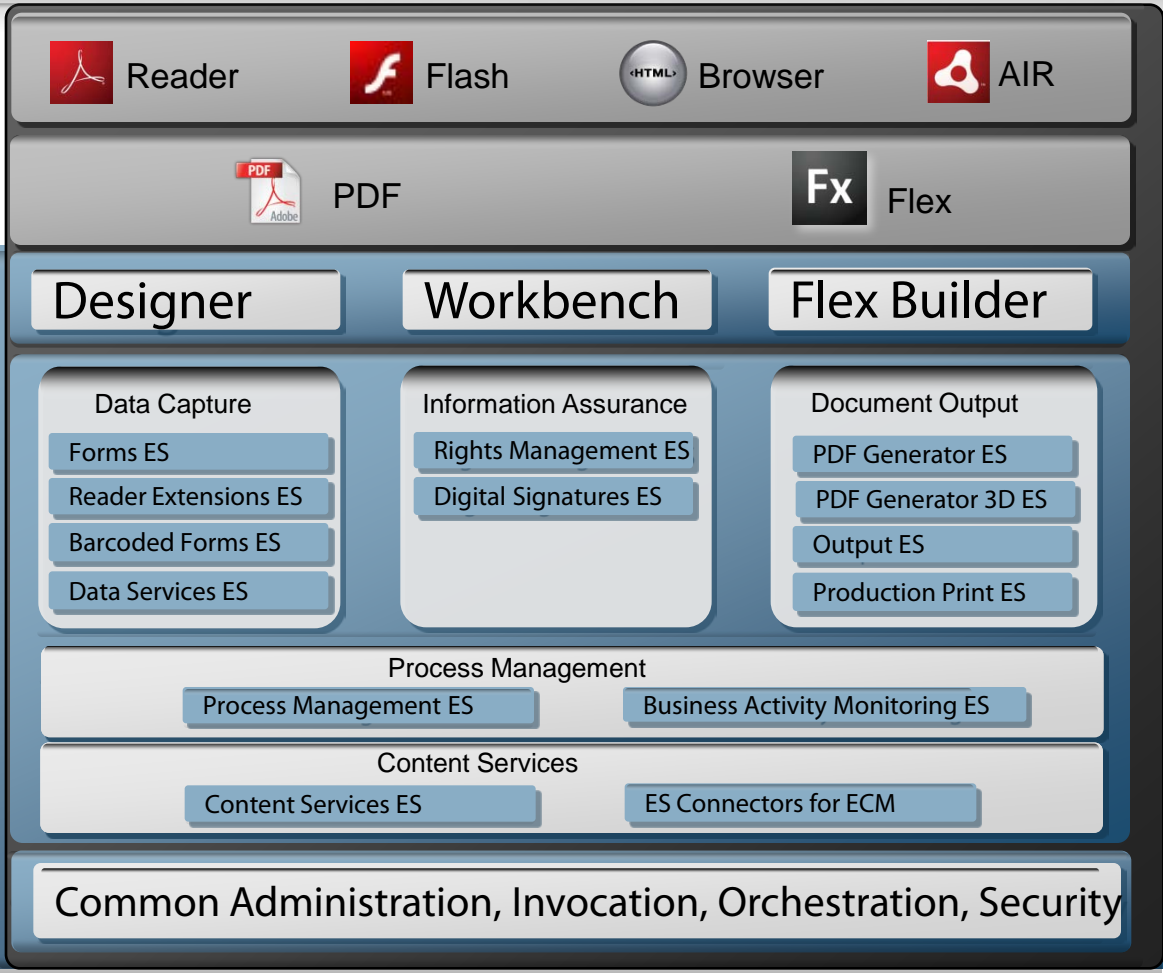
User Interface Technologies

Tooling

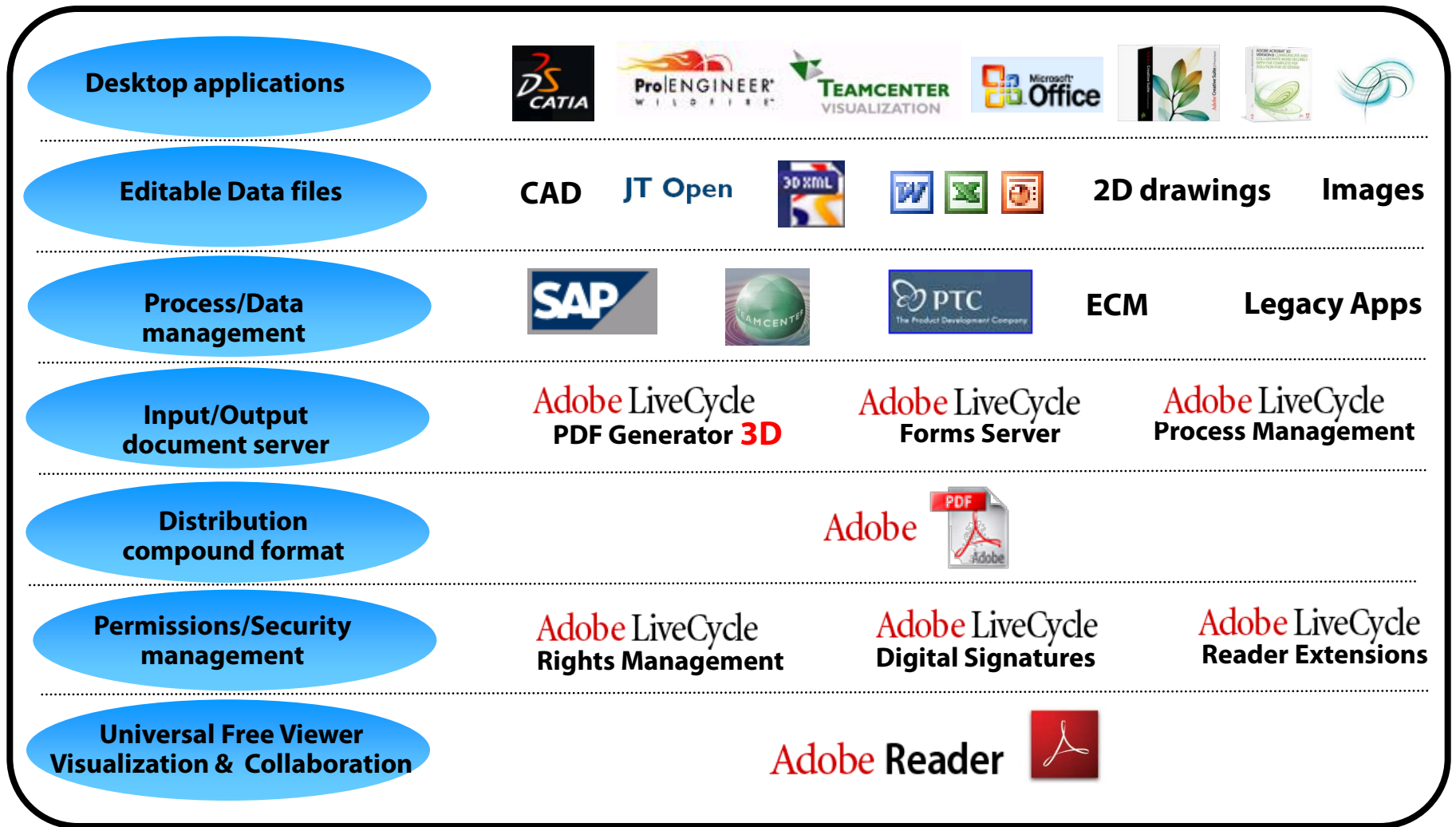
Solution Components

LIVECYCLE ES
ENTERPRISE SUITE

Foundation



Adobe LiveCycle in the Enterprise stack



PDF Generator 3D: Key Features

- Integration in LiveCycle as a new service to PDF Generator
- Batch conversion of ALL engineering data to PDF
- On-demand and automated submission option
- Watch folder interface for out of the box automated processing
 - Source folder / Output folder with custom settings
 - Generation of log file with results/errors
- Support for LiveCycle API interfaces for integration with existing apps
- Support for conversion with PDF templates
- Conversion to PDF/PRC and PDF/U3D
- Integration with PLM/PDM systems through partners implementation
- Windows only

Supported Formats

Non-3D Supported Formats

Print (.ps, .prn, .eps)

Print

Image (.jpg, .gif, .bmp, .tiff, .psd, .png)

Pictures

Microsoft® Office (.doc, .xls, .ppt)

MS Office

Corel WordPerfect, OpenOffice

Microsoft Project (.mpp)

Text (.txt, .rtf)

Text

Web (.html)

PDF to image

PDF to text and HTML

PDF 1.3, to 1.6 PDFX-1A, PDFX-3 PDF/A

Microsoft Visio (.vsd)

2D

AutoCAD (.dwg)

3D Supported Formats

3D

Catia V4/V5, CGR, 3DXML

NX, NX I-deas, Solid Edge, JT

Pro/ENGINEER, Wildfire, CADD5

SolidWorks

AutoCAD, Inventor

OneSpace Designer

Lattice

Parasolid

ACIS

STEP, IGES, IFC

VRML, STL

3D Studio, Collada, OBJ

Universal 3D

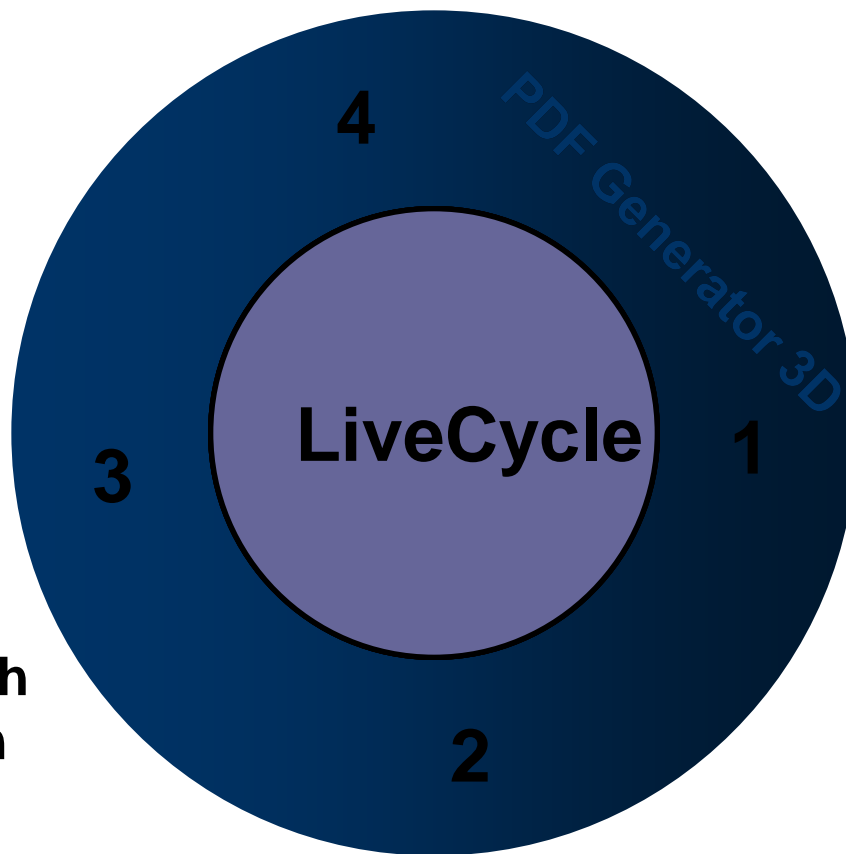
LiveCycle PDF Generator 3D: Levels of Functionality

4. Adds Interactivity with Forms & 3D in PDF

- Most complex – CAD, Data, XFA to 3D bridging, interactivity

3. Adds PDF with 3D generation from PLM/PDM & CAD

- CAD specific



1. Static PDF generation from PLM/PDM data

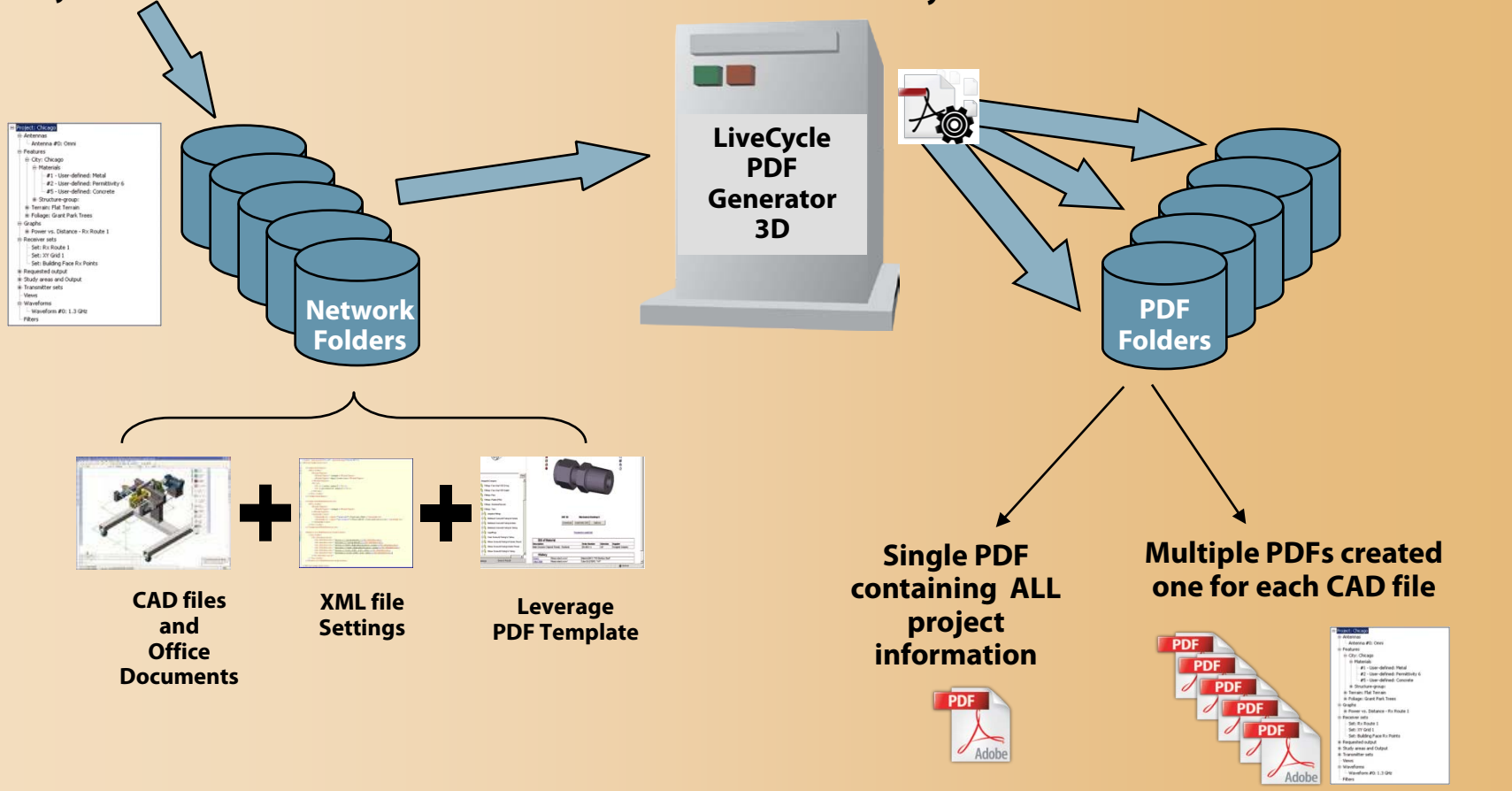
- Most basic
- Event handling, retrieve/store, conversion, invoke LC services
- 3D is optional

2. Adds dynamic Forms generation from PLM/PDM data

- Data-enabled documents

Batch Processing using Watch Folders

- 1 CAD data and other documents deposited by PDM/PLM
- 2 Detection of new files created or modified
- 3 Files are converted based on settings and security controls
- 4 PDF files produced based on Templates



Interactive PDF Form with 3D and JavaScript

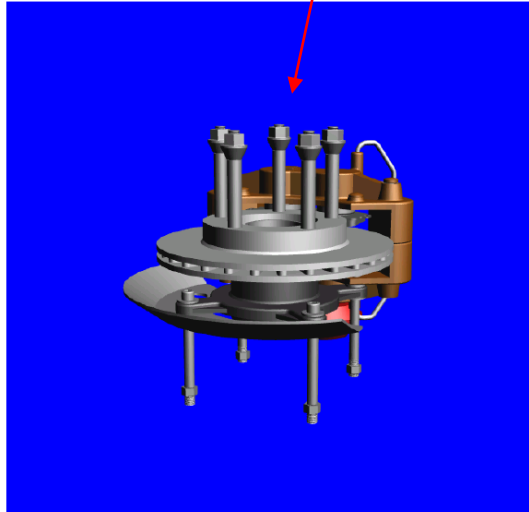
Action buttons using JavaScript

3D Annotation + JavaScript



Complete Assembly Caliper Section Caliper Closeup

Max Stop Disc Brake	
Product Group: Transmission Asm.	Testing Proc.
Rotor (1267)	
Caliper (3452)	90329314
HS Code:	90329111
Trademark:	Global
Model:	6010
Product Description	Part #.
Rotor	ROT5V3
Disc Diameter	11.0 in. +/- 0.003 in.
Disc Thickness	0.75 in. +/- 0.003 in.
Bolt Hole Diameter	0.335 in.
Number of Vents	28 Vents
Max Safe Heat Loss	200 BTU/s / min
Case	CCA4-PB
Width	10.846 in.
Piston to opposite Piston	2.339 in.
Max Pad Thickness	1.166 in. (including backplate)
Piston Surface Area	2.83 in ² x 4 Pistons = 11.313 in ²
Max Fluid pressure	3800 psi.
Gear Sets	HUB5-SS
Hub Bolt Length	5.08 in.
Hub Bolt Diameter	0.328 in.
Hub Thickness	1.05 in.
Knuckle Bolt Hole Diameter	0.25 in.
Hub Bolt Tensile Strength	200 kN

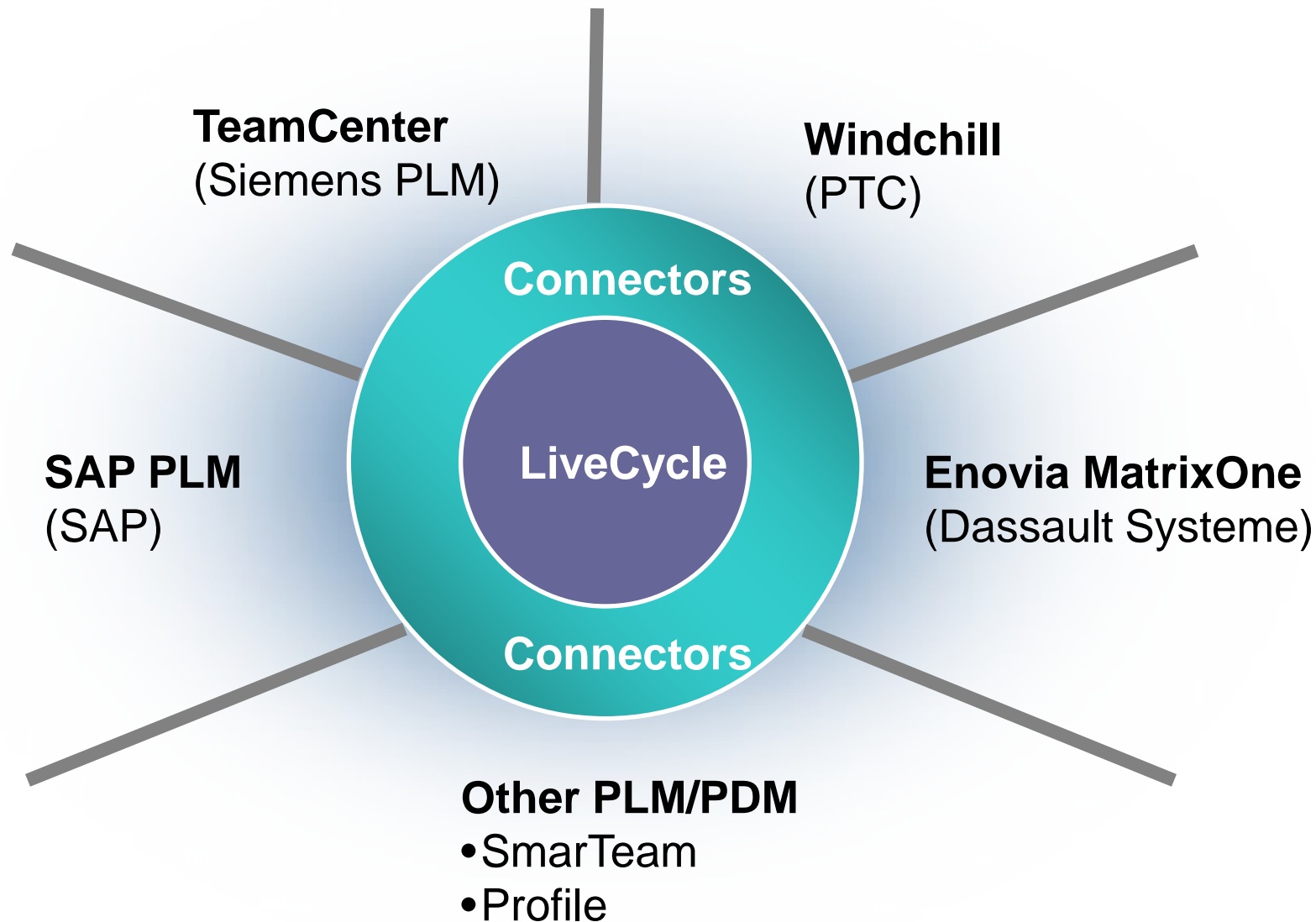


XML feed

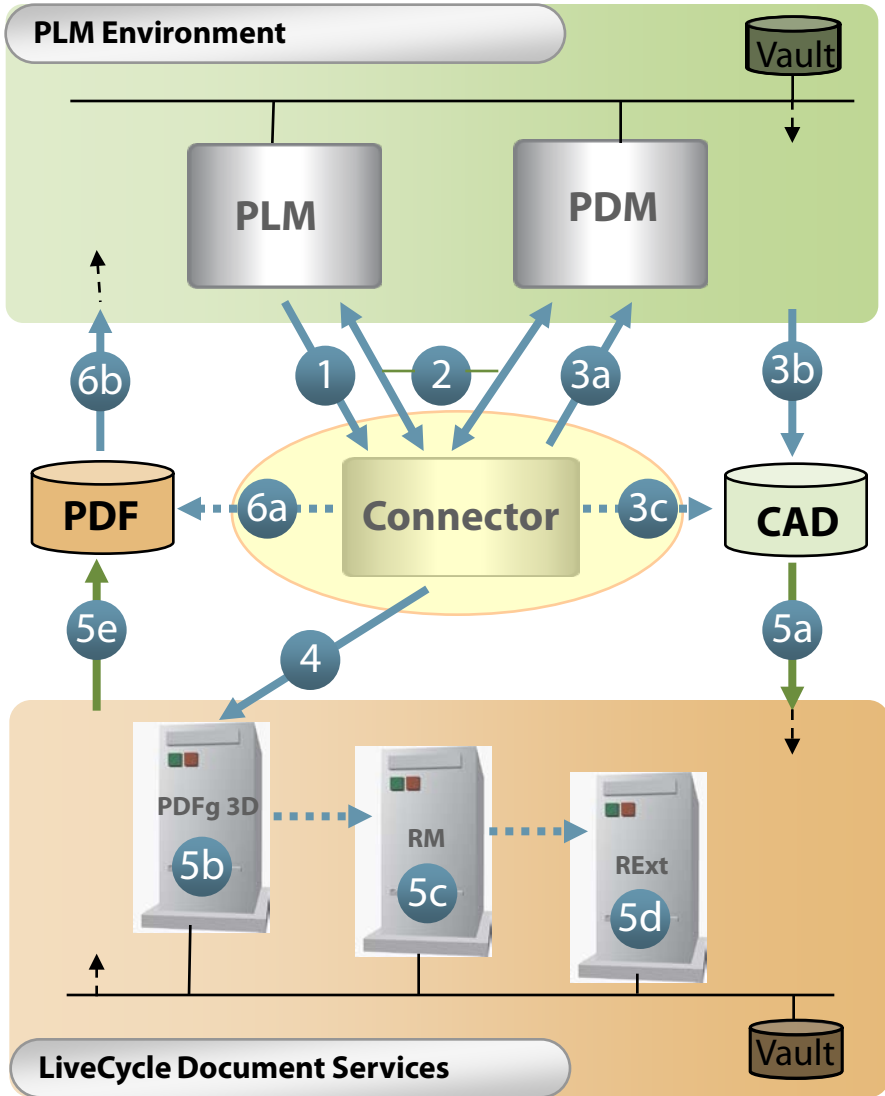
CAD attributes feed



LiveCycle Connectors for PLM/PDM

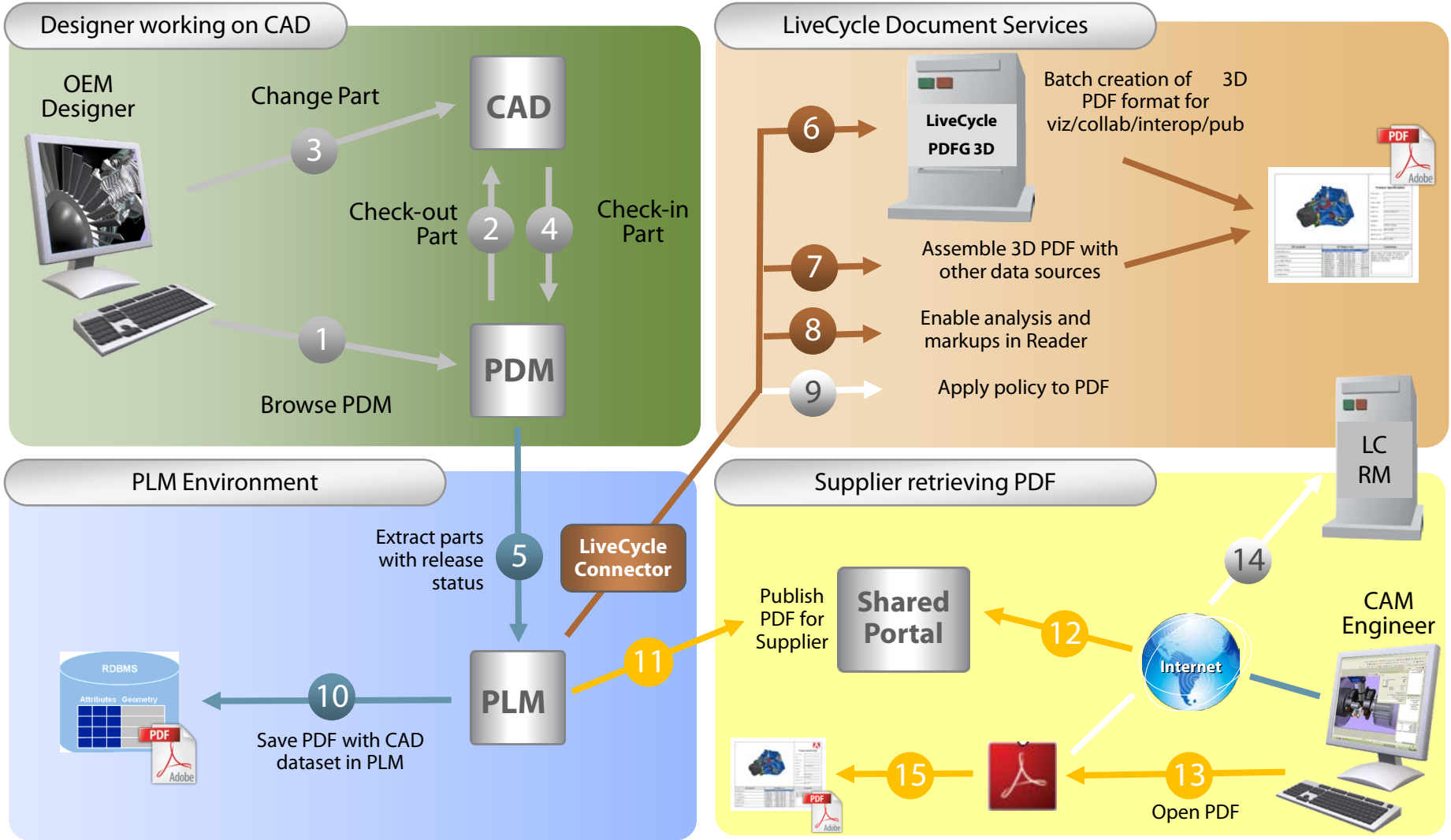


LiveCycle Connector: Bridging the PLM/PDM with LiveCycle

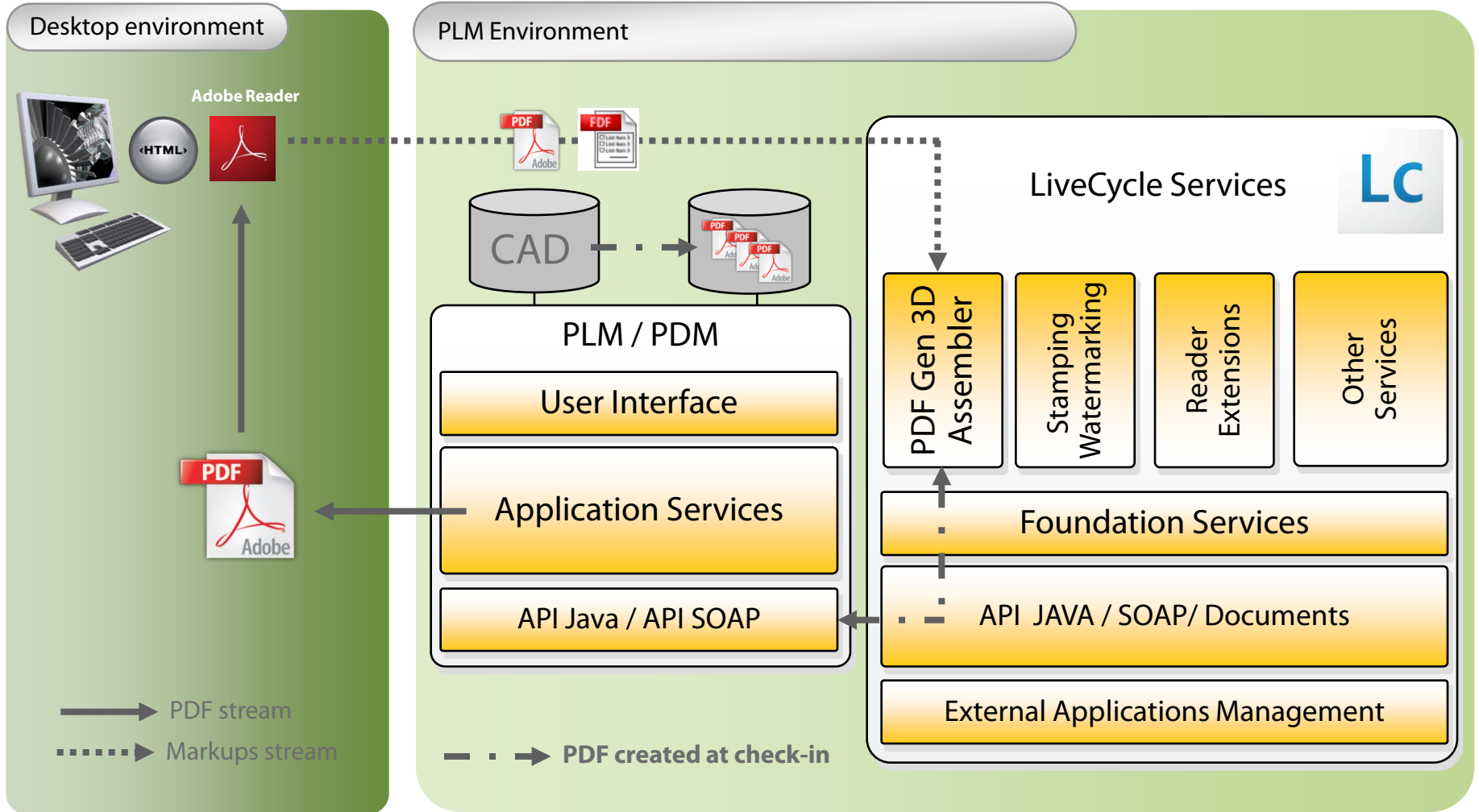


1. On event "E" PLM calls a Connector Java service "S" with an object identifier "I"
2. Connector gets all the information needed on object "I", such as status, file location, relationships, meta data, docs, etc... from PDx
3. Connector requests from PLM to export product files and assembly information related to object "I" in shared disk "CAD" and copies any additional data needed
4. Connector calls LiveCycle PDFG 3D service and passes location of assembly file and product files on shared disk "CAD" with settings and possible template file
5. PDFG 3D retrieves data, then executes document service(s) requested and finally produces PDF file(s) and copies them to shared disk "PDF"
6. Connector accesses PDF output and stores it back into PLM or PLM or both with possible invocation of PLM event

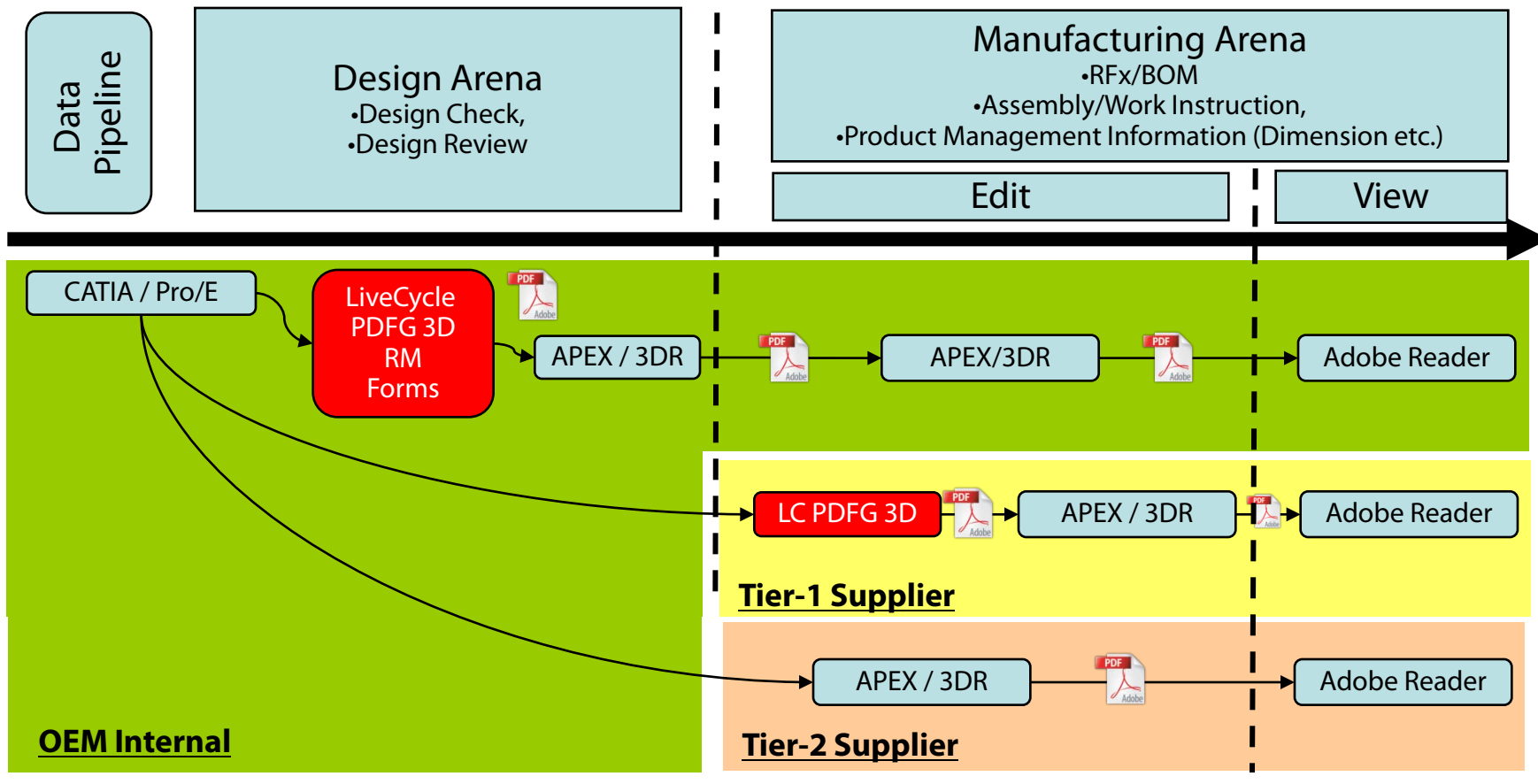
Released CAD Data Workflow



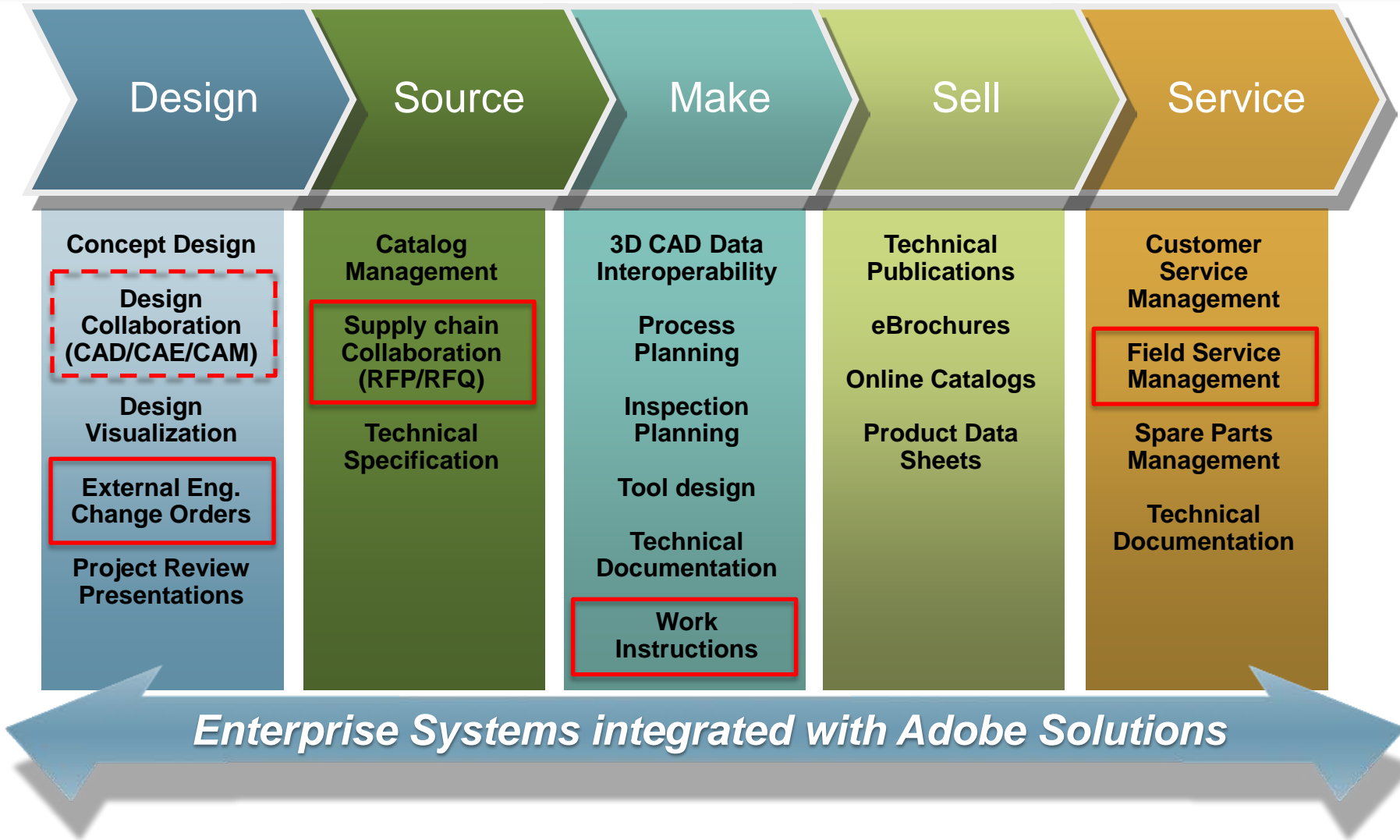
Engineering Data Viewing/Collaboration Workflow



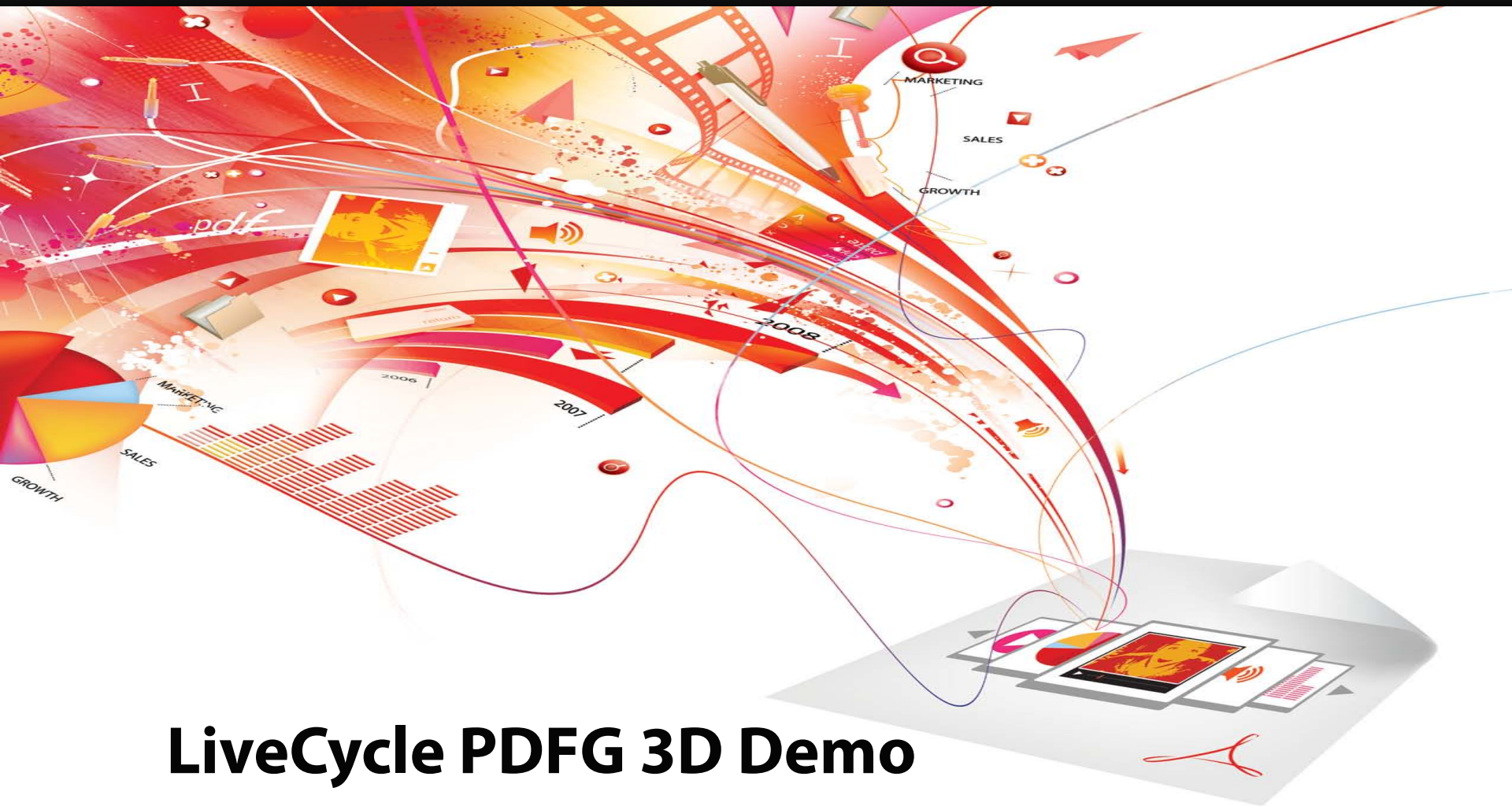
Supply Chain Communication Workflow



Manufacturing Workflows and Adobe Targets



Demonstration



LiveCycle PDFG 3D Demo