



MBE WORKSHOP:

ELYSIUM INTRO

MBE TECHNOLOGY

IMPLEMENTED WORKFLOWS

ANNALISE SUZUKI
DIRECTOR OF TECHNOLOGY &
ENGAGEMENT

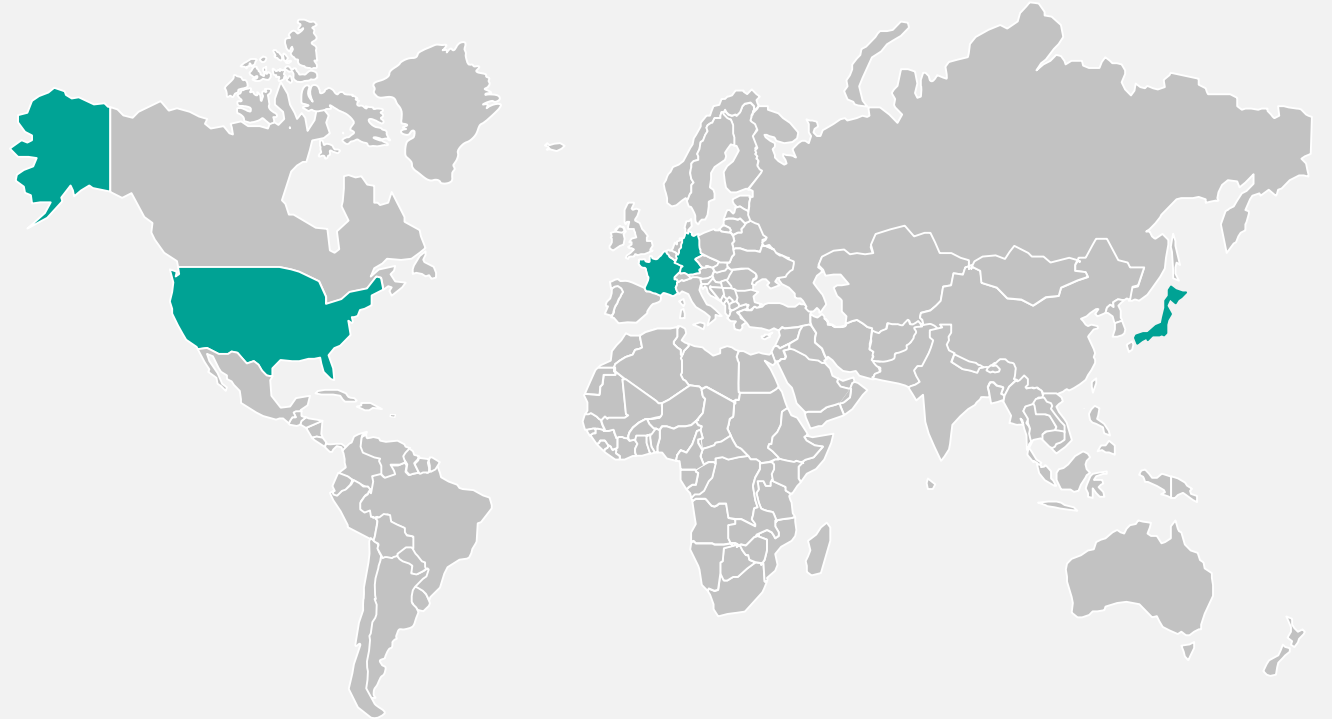




ELYSIUM GLOBAL

Specialized + dedicated technologies with a global reach

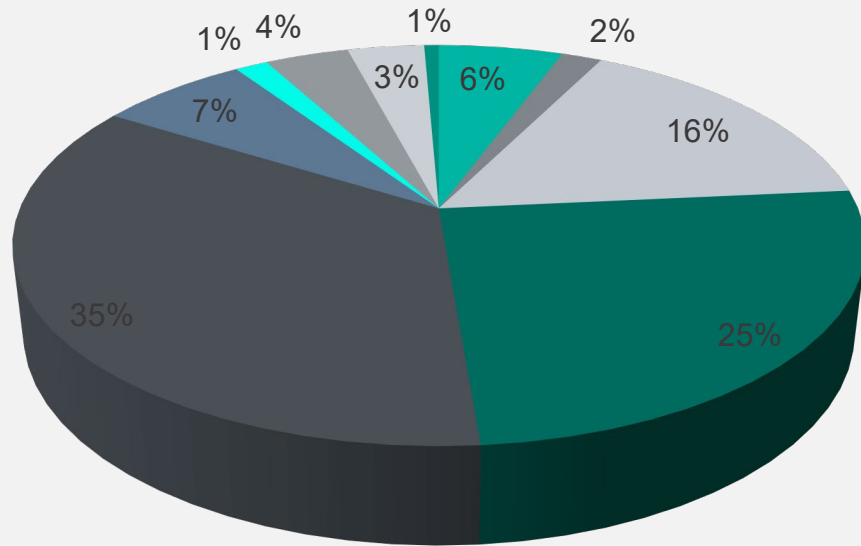
- 35 years of CAD Expertise
- Strong partnerships with CAD Vendors
- 3D Data Interoperability Expertise
- Off-the-Shelf Software
- Development Projects
- Migration Services





INDUSTRIES SERVED

ELYSIUM has over 2800 customers around the world with a strong position in the manufacturing industry.



- Aerospace & Military
- Automotive OEM
- Automotive Supplier (Tier-x)
- Energy | Oil & Gas
- Engineering Services
- Architecture & Construction
- Automotive Supplier (Tier-1)
- Consumer Electronics & Products
- Heavy Industry
- Shipbuilding

NORTHROP GRUMMAN

GENERAL DYNAMICS

LOCKHEED MARTIN

BOEING

AIRBUS
DEFENCE & SPACE

BAE SYSTEMS



Rockwell
Collins

Honeywell

ADIENT



DAIMLER



HYUNDAI



FAW



RENAULT



TATA



MITSUBISHI MOTORS

HITACHI

MITSUBISHI
HEAVY INDUSTRIES, LTD.



MAZDA



TOYOTA

SAMSUNG

Johnson
Controls

MAGNA



SUZUKI



VOLVO

NOKIA

SIEMENS

Continental

KoTo

AININ



Ford



HONDA

BOSCH

BRIDGESTONE

DELPHI

KOMATSU



LAND-ROVER



JAGUAR

TOSHIBA

Rolls-Royce

Kawasaki

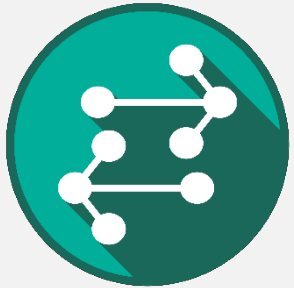
Panasonic

Ogihara



MODEL QUALITY IN ALL 3D APPLICATIONS

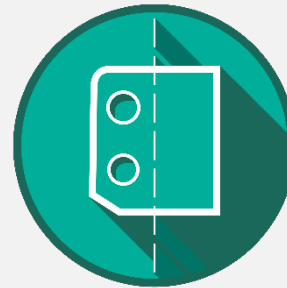
Many solutions to help your 3D data interoperability



Translation



Healing



Simplification



Validation



Migration
(Feature-Based Translation)



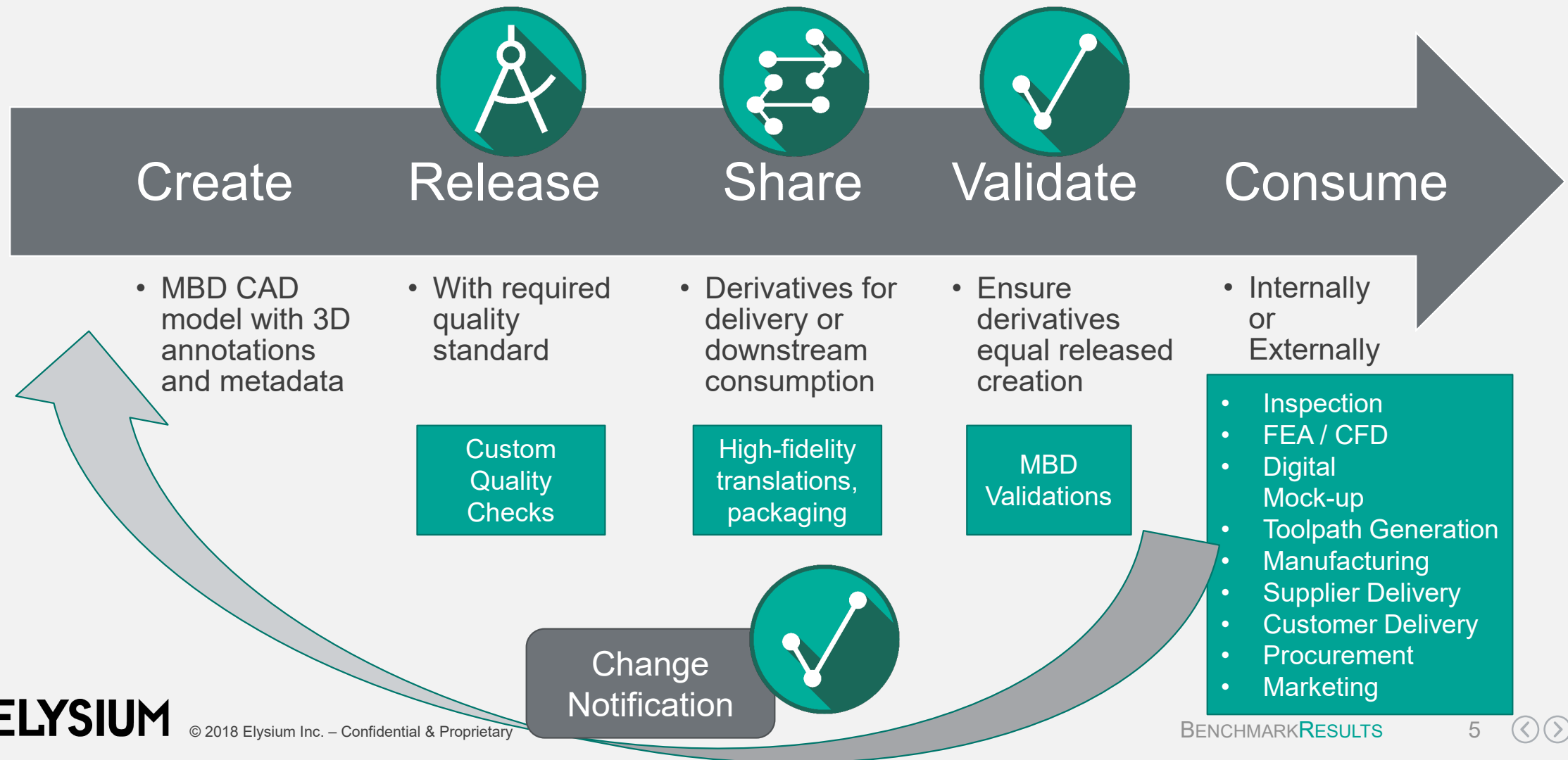
Quality Check



Solid Enveloping



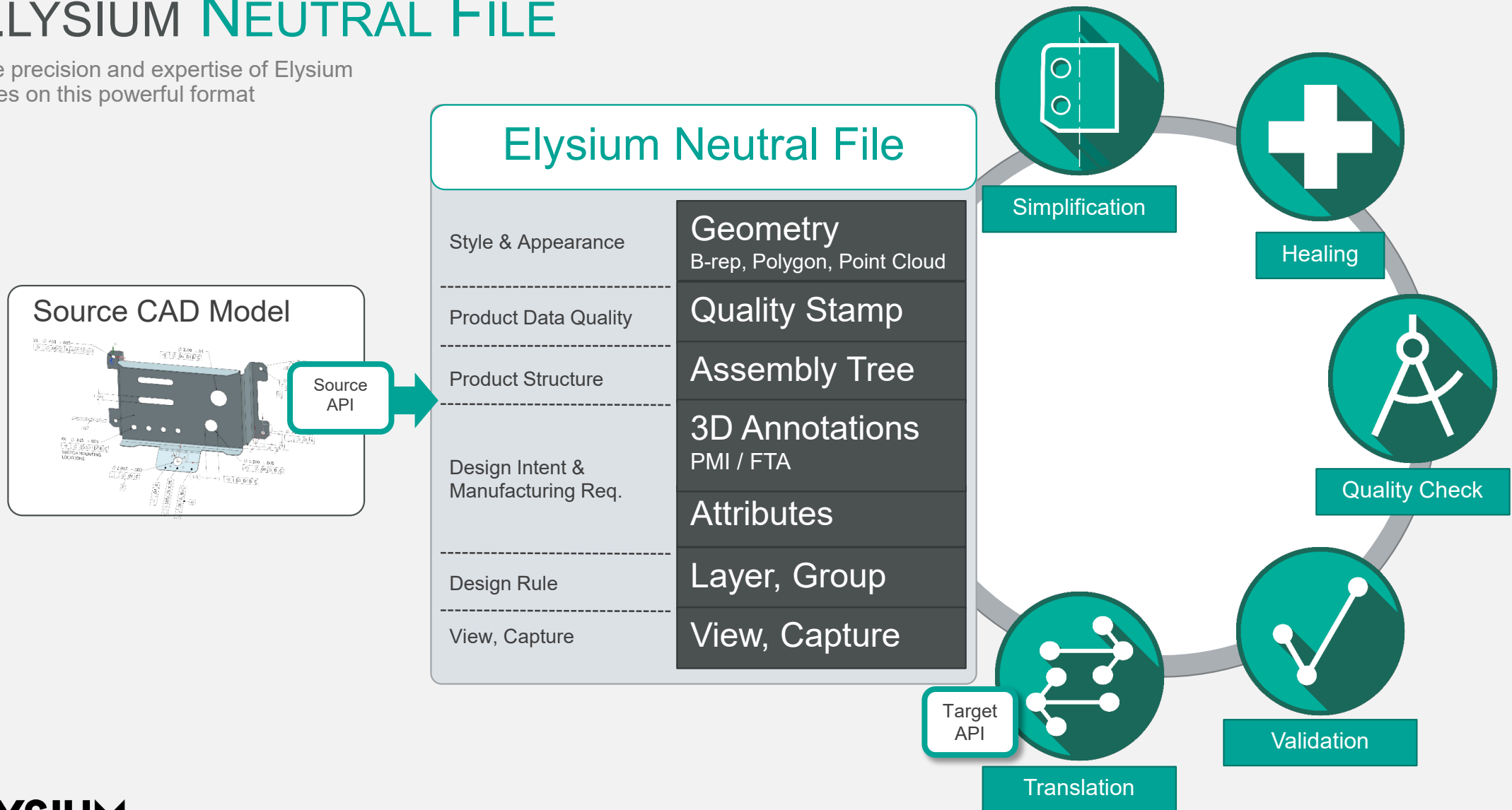
STEPS IN MODEL-BASED LIFECYCLE





ELYSIUM NEUTRAL FILE

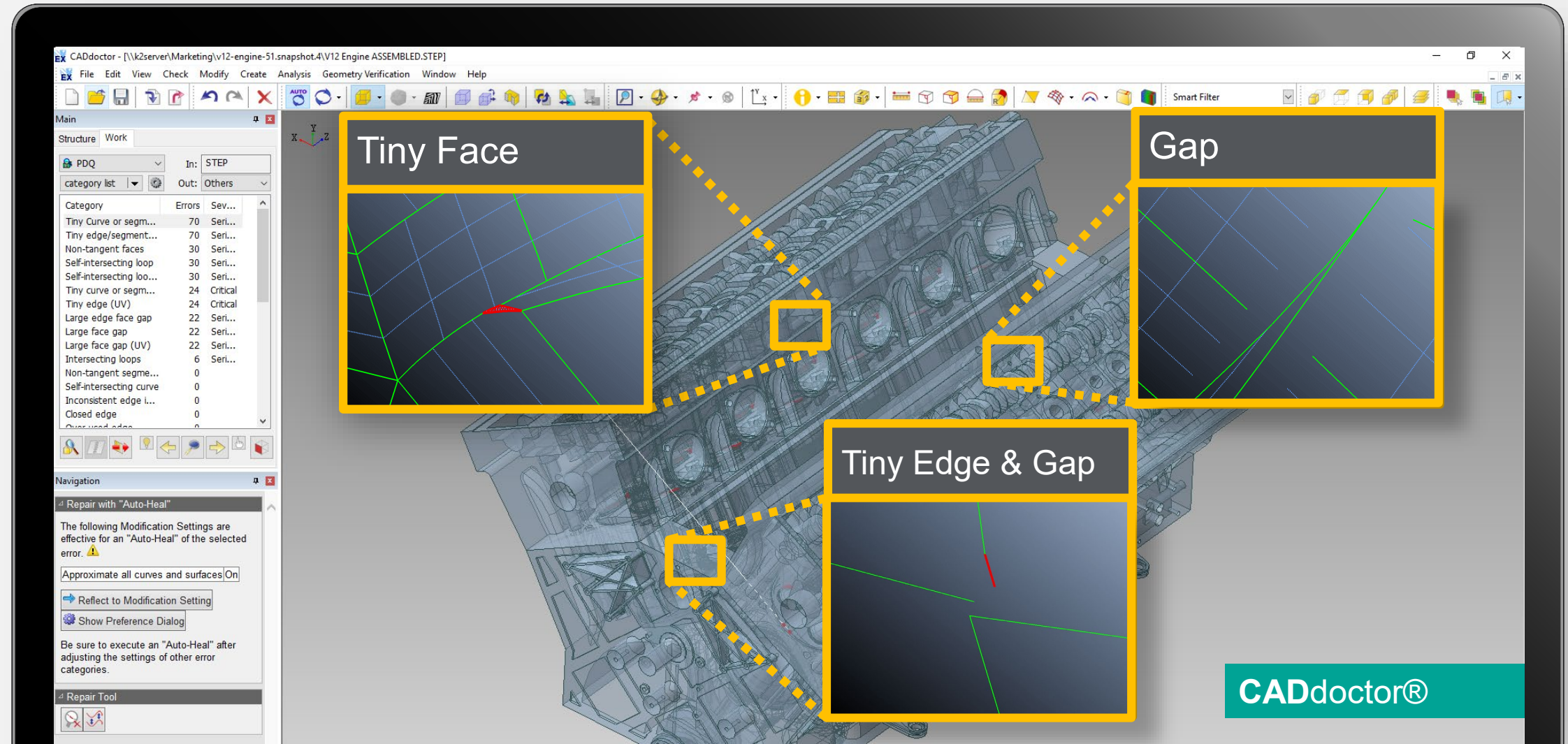
The precision and expertise of Elysium relies on this powerful format





ACCURATE GEOMETRY ERROR CHECKING

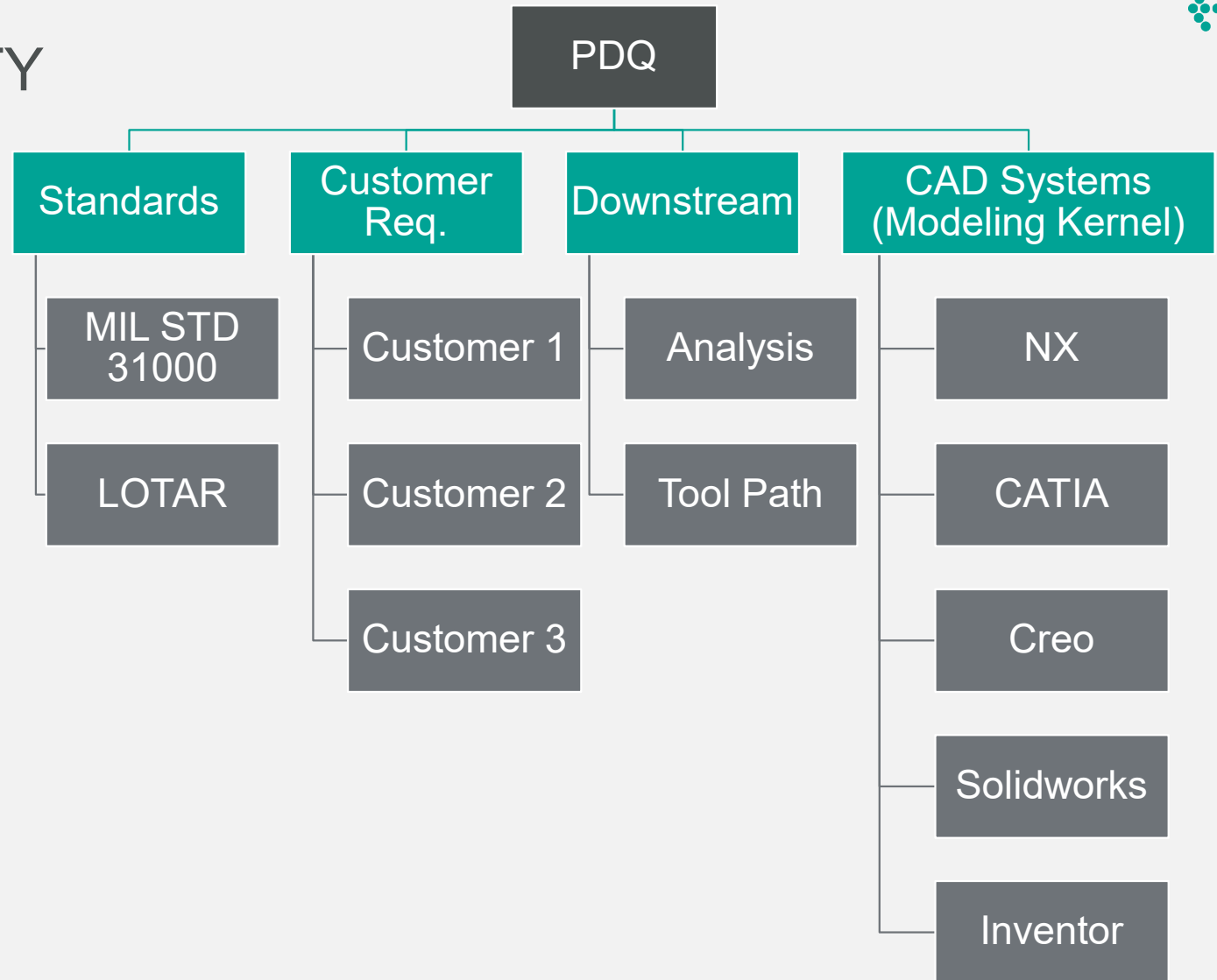
Elysium provides Product Data Quality (PDQ) checking to assure 100% high fidelity models for an enterprise.





PRODUCT DATA QUALITY CHECK/VERIFICATION

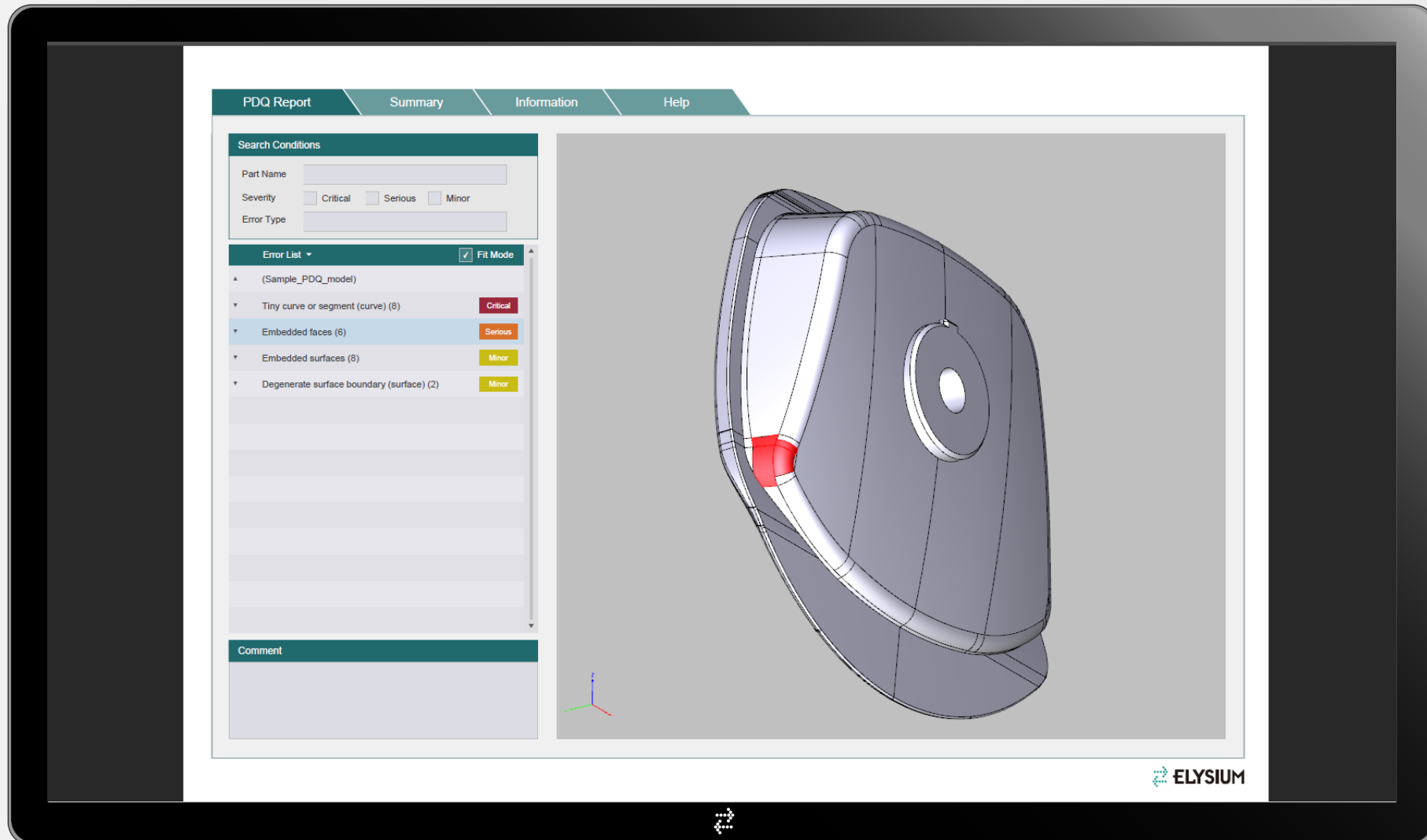
- Elysium offers 78 PDQ check items
- Customize checking criteria
- Check against multiple criteria





PDQ REPORT IN 3D PDF

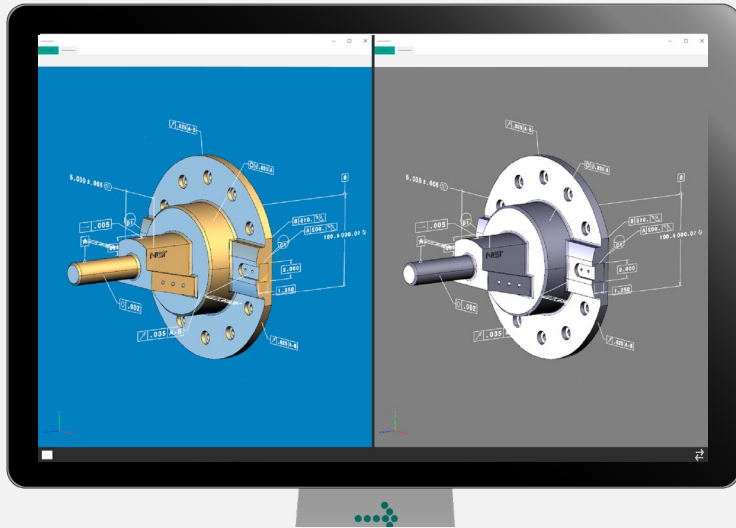
Check model quality to a standard (SASIG, LOTAR, MIL STD 31000) and customer requirements



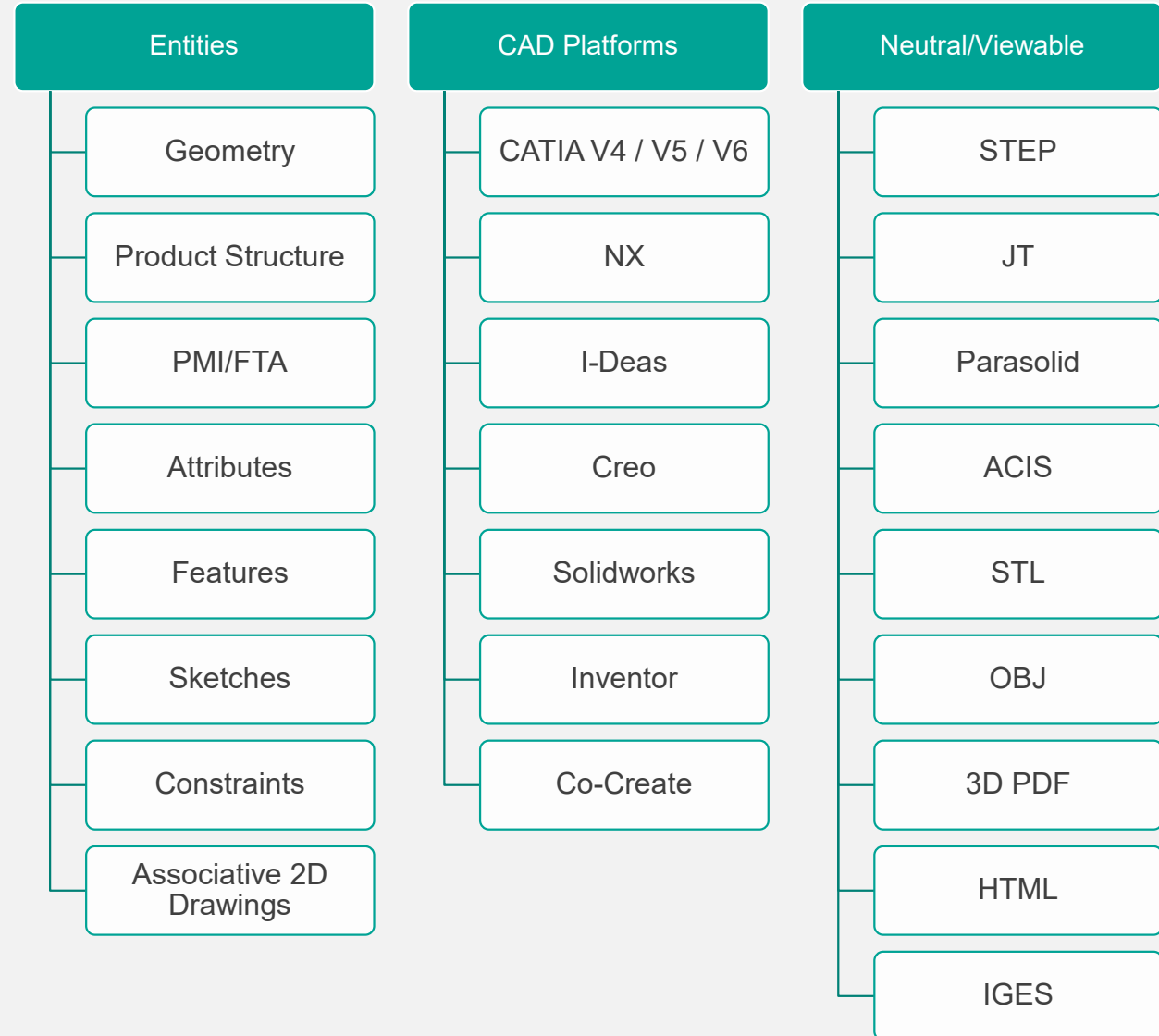


DATA TRANSLATION SUPPORT

Elysium supports a variety of different



© 2018 Elysium Inc. – Confidential & Proprietary





GEOMETRY SIMPLIFICATION

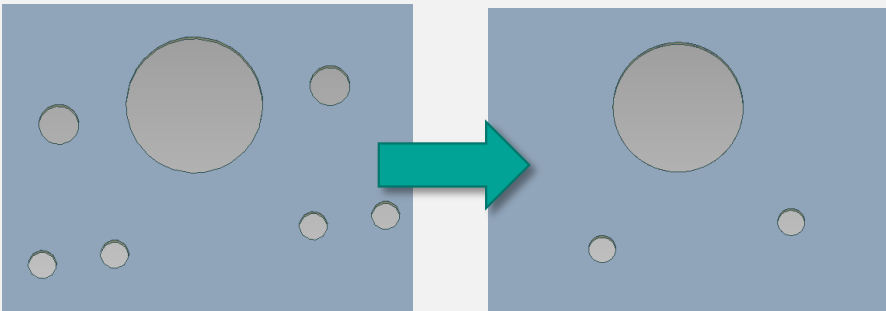
Optimize models for CAE analysis and intellectual property protection

Feature Recognition and Simplification

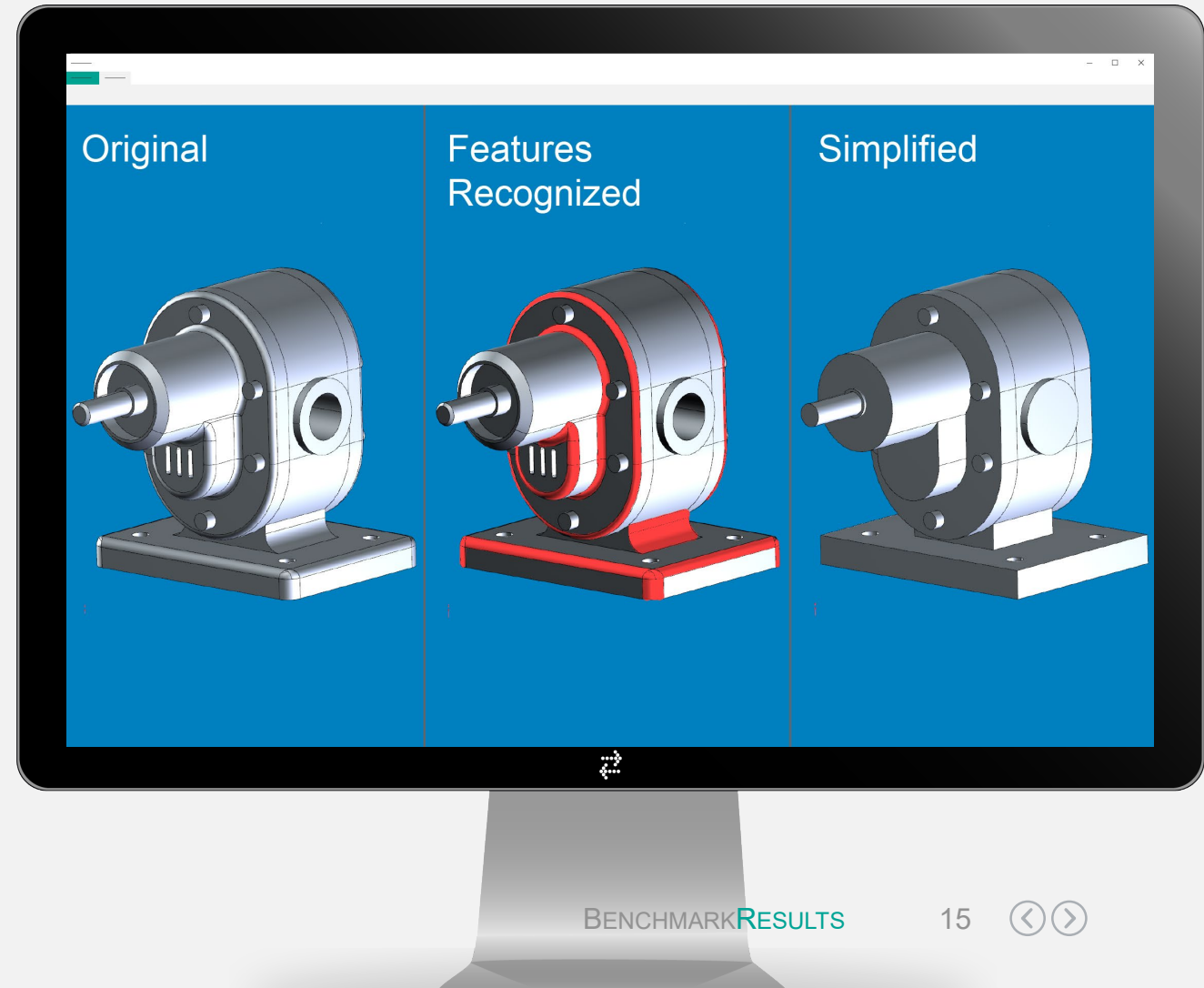
Automatically recognize geometric features like fillets or holes and remove them. Enable to recognize and remove overlapped/converging fillets and variation fillets.

Flexibility for Feature Removal

Choose which features you want to remove and which ones you want to remain. Allowing you to have full control of information shared.



Automatically recognize features, such as holes, and allow you to remove all or select the ones you want to remove



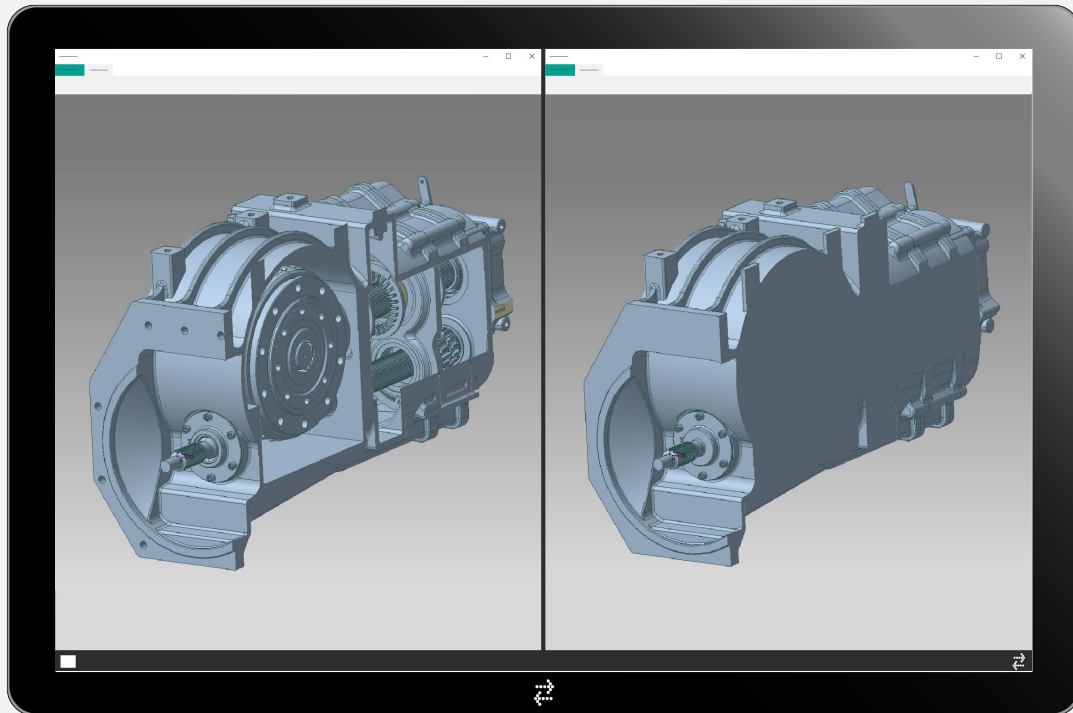


SOLID ENVELOPE | SURFACE EXTRACTION

Automatically simplify models for CAE, DMU or other downstream processes

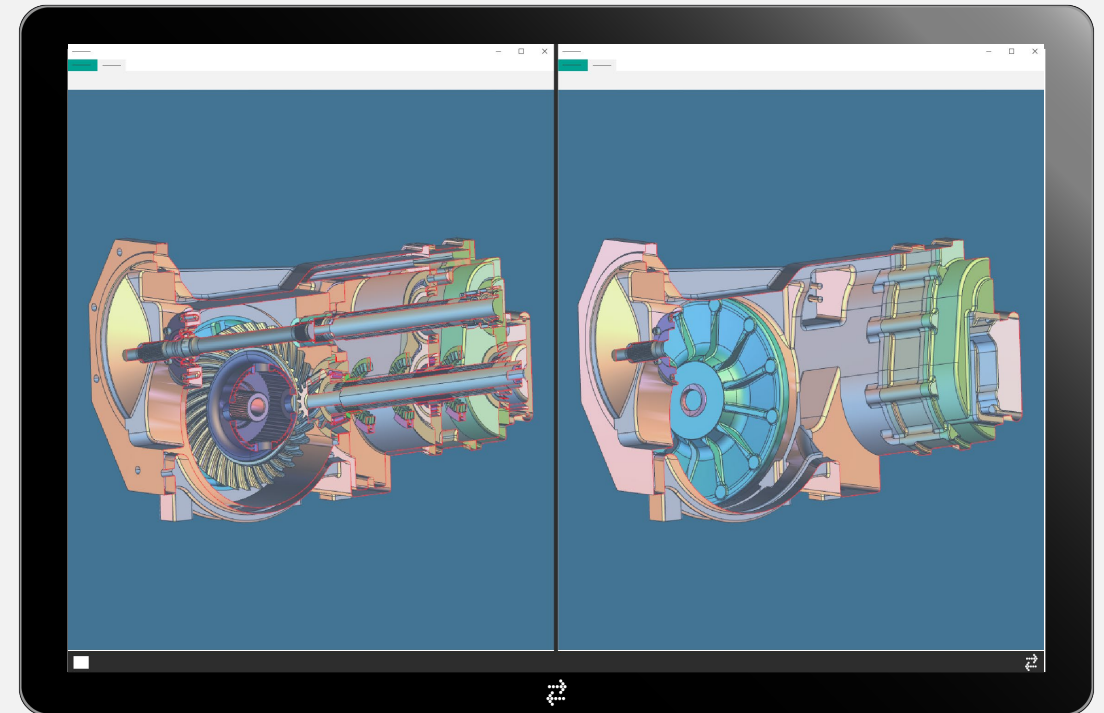
Solid Envelope

Fill inside of assembly model to create a solid model for size reduction and protect IP.



Surface Extraction

Extract the outline of the exterior parts or interior parts.





VALIDATION OF MBD DATA

Quickly identify differences between 2 files

Use Cases

Conversions

Engineering Changes

Archival

CAD Upgrades

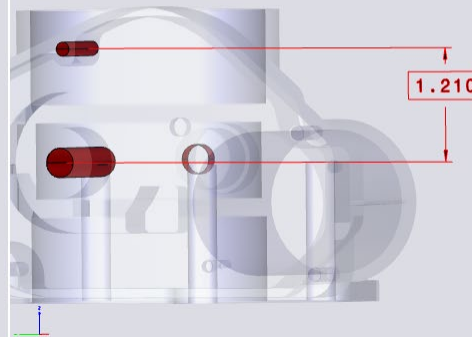
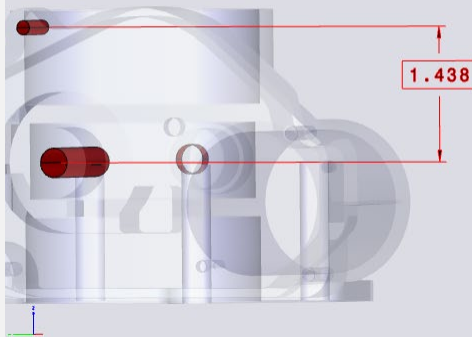
Report Types

3D PDF

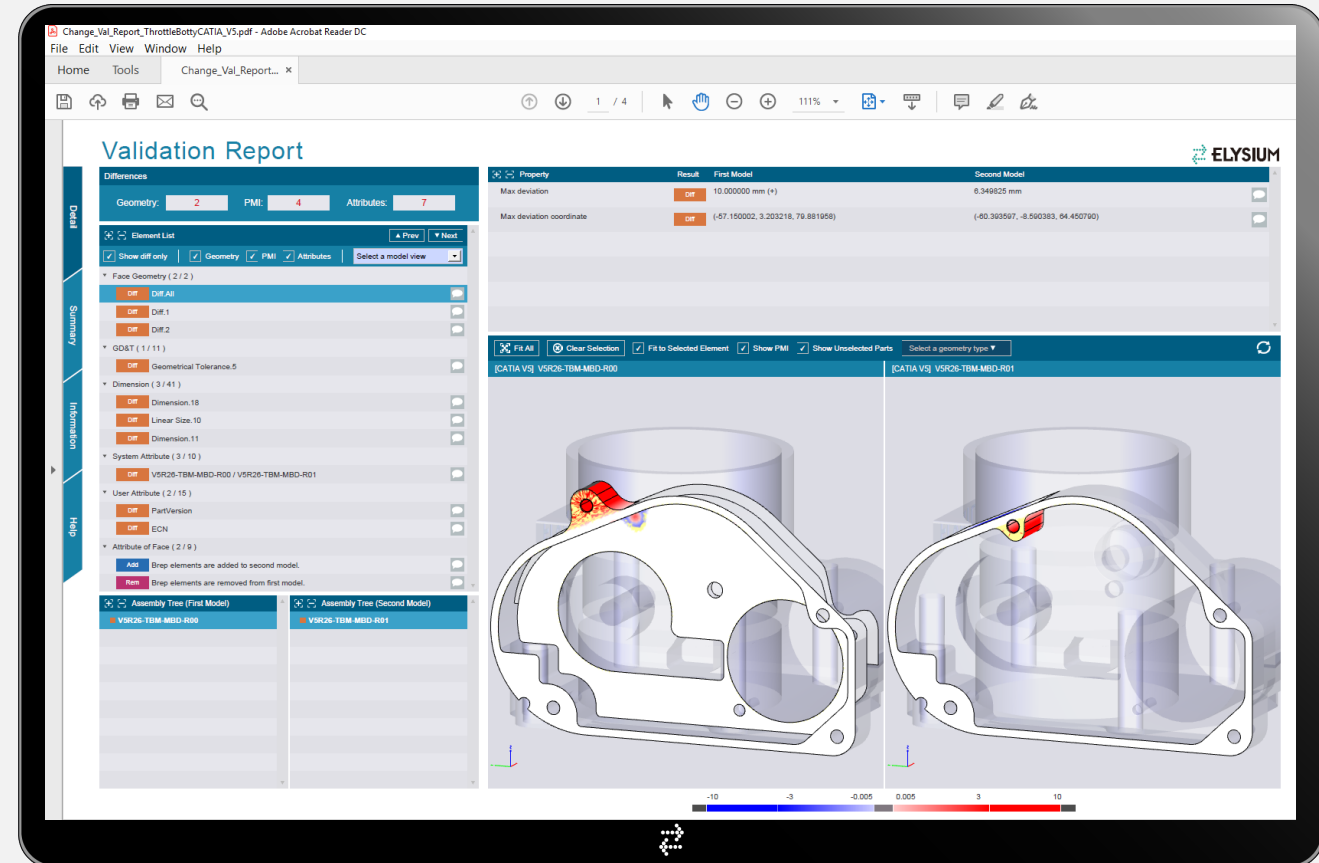
HTML

DiffViewer

XML



Elysium provides validation reports in 3D PDF, HTML, and XML for easy share across organization(s). No CAD system required.



ELYSIUM

© 2018 Elysium Inc. – Confidential & Proprietary

BENCHMARK RESULTS

18






DATA PACKAGES

Create easy to share Data Packages that includes 3D model viewing and ability to add support docs (spreadsheets, BOM, etc.)

Cover Sheet
Product Definition
Attachments
Help

Cover Sheet



ELYSIUM

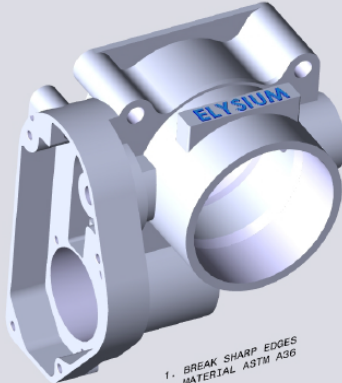
CONTENTS

COVER SHEET 1
PRODUCT DEFINITION 2
ATTACHMENTS 3
HELP 4

REVISION HISTORY

REV	DESCRIPTION	DATE	ECN #
Rev_000	Initial release.	13/03/2018	-
Rev_001	The cap pin location change.	15/03/2018	ECN-001

Copyright c 2018 by Elysium Inc.
All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law. For permission requests, write to the publisher, addressed "Attention: Permissions Coordinator," at the address below.



PART = TB ASSEMBLY
DESIGN MANAGER DAN DEZAROV
DESIGNER MAS
APPROVED DATE 2017-12-26

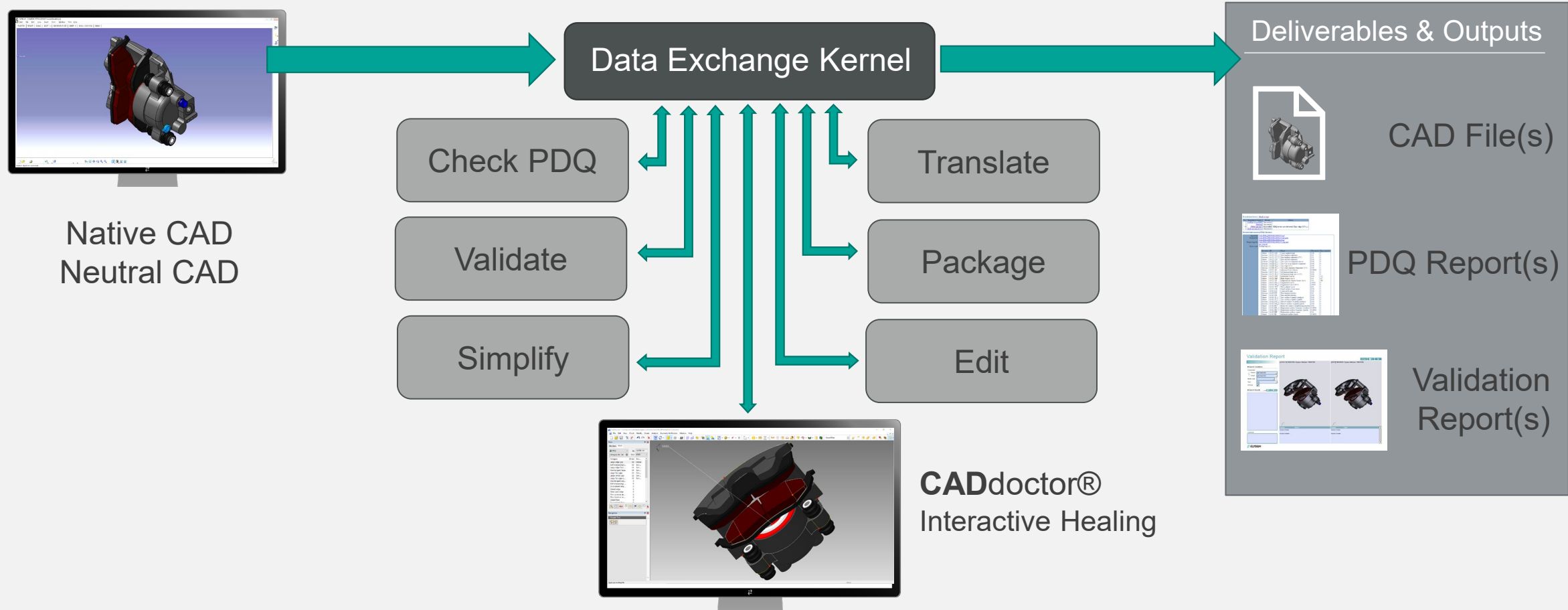
1. BREAK SHARP EDGES
2. MATERIAL ASTM A36

20



ASFALIS™ FUNCTIONALITY

Enterprise system for automated translation and optimization of 3D CAD data





MBE: ACHIEVING THE GOAL STARTS WITH THE BASICS

Momentum starts here.

- Automating processes to support MBE workflows
 - Concentrate on 3D / digital data quality
 - Share-ability
 - Concentrate on foundational strengths
 - Integrate-ability
 - Adaptability
 - Configurability
 - End-user Adoptability
 - Enable opportunities to build, grow, advance, and re-use
 - Maximize ideal tools where appropriate
 - Connect / integrate
 - Leverage standards where appropriate

DEMO



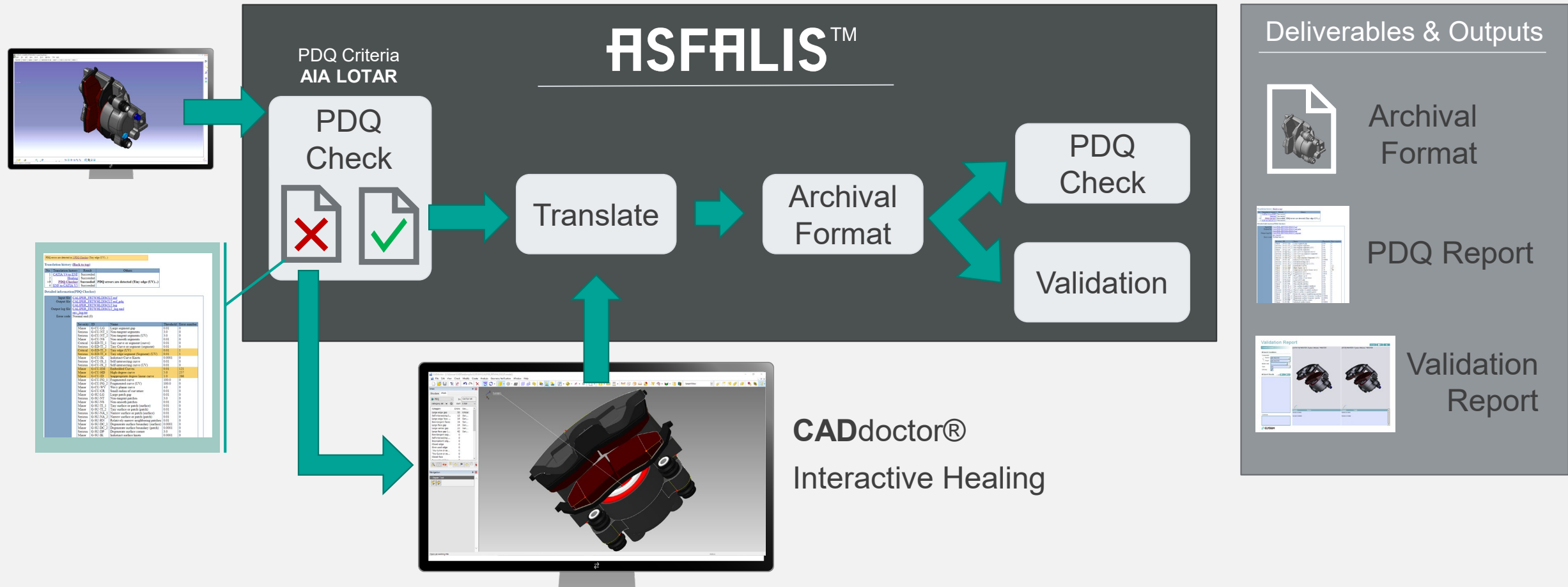
Actual Customer Use Cases

PDQ | Translation | Validation



ARCHIVAL PROCESS

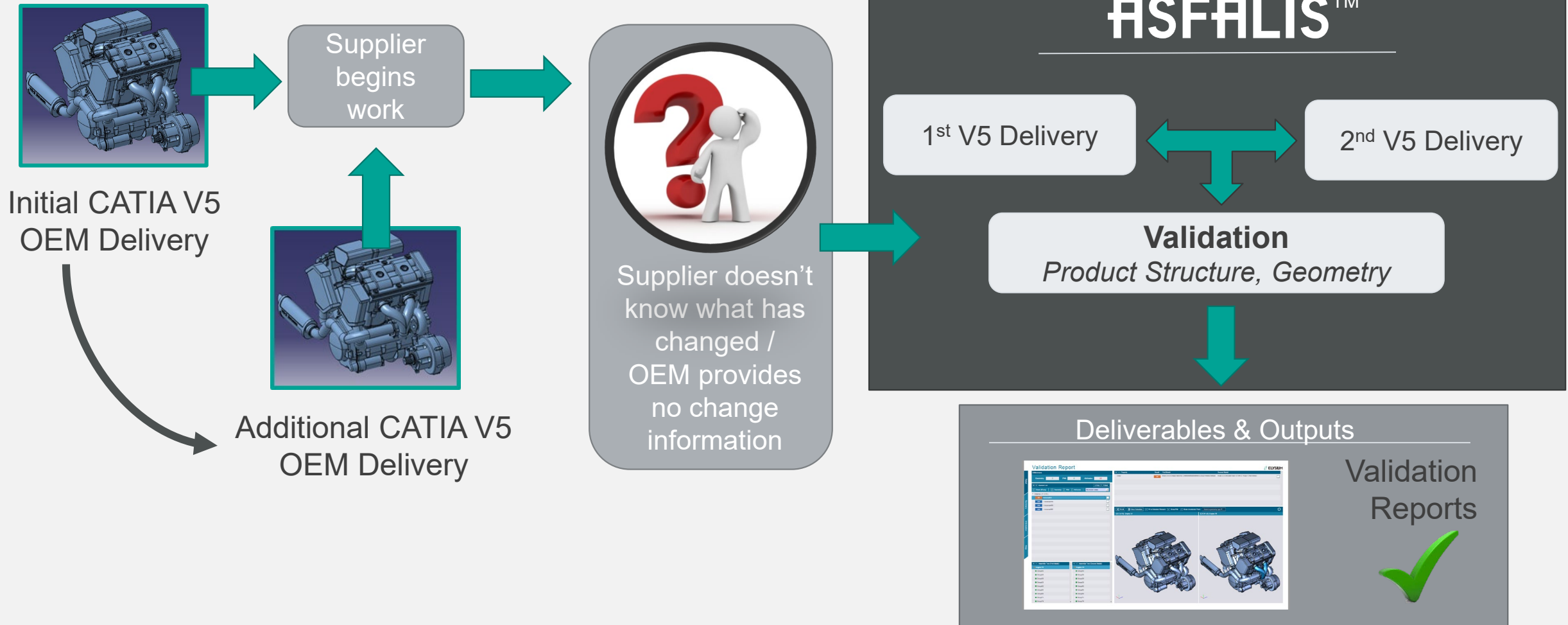
Elysium's technologies can simplify your archival process for accurate and shareable documents for future use





WORK IN PROGRESS [WIP] VALIDATION

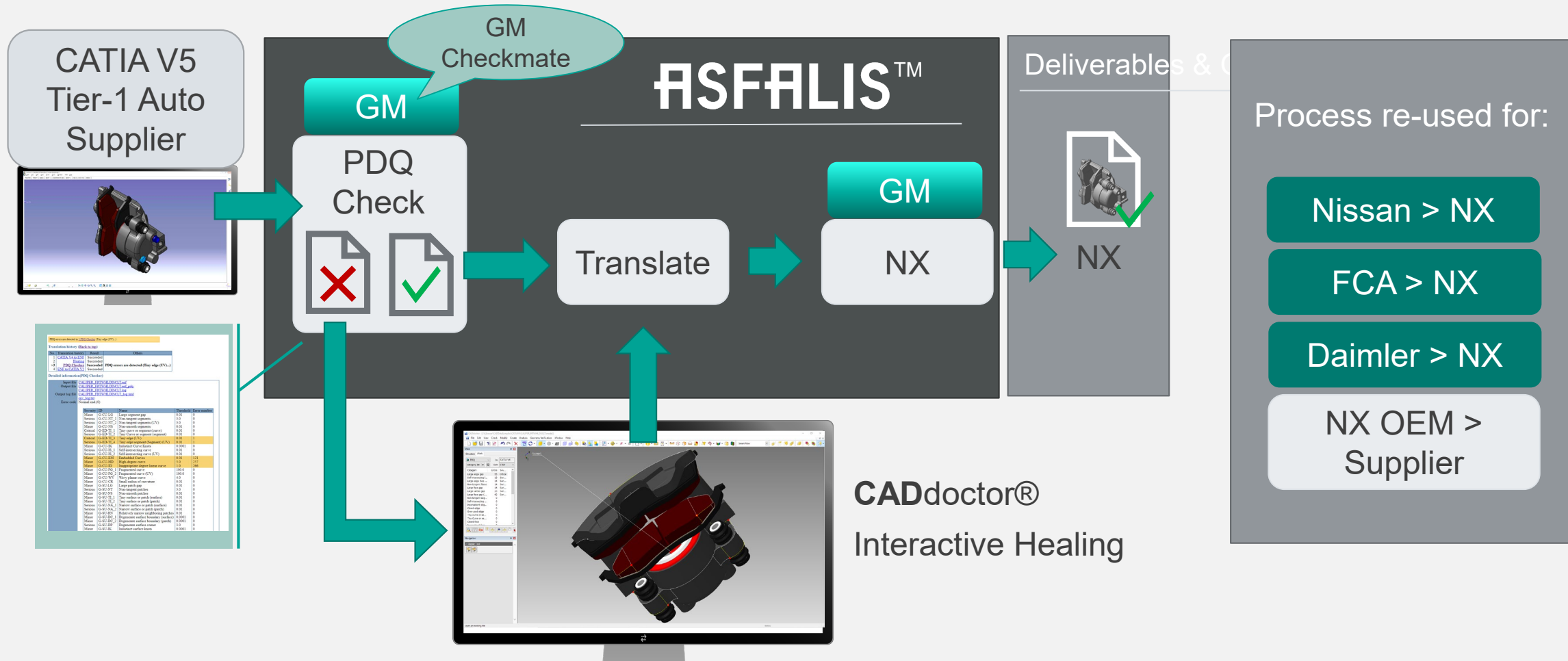
Tier One Automotive Supplier





ACHIEVING QUALITY DELIVERABLES

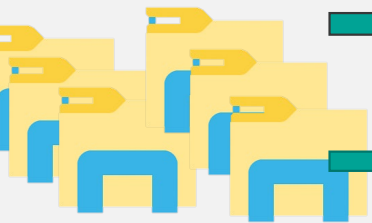
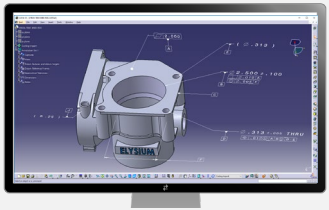
Optimize quality and translation to meet customer deliverables *the first time. Every time.*



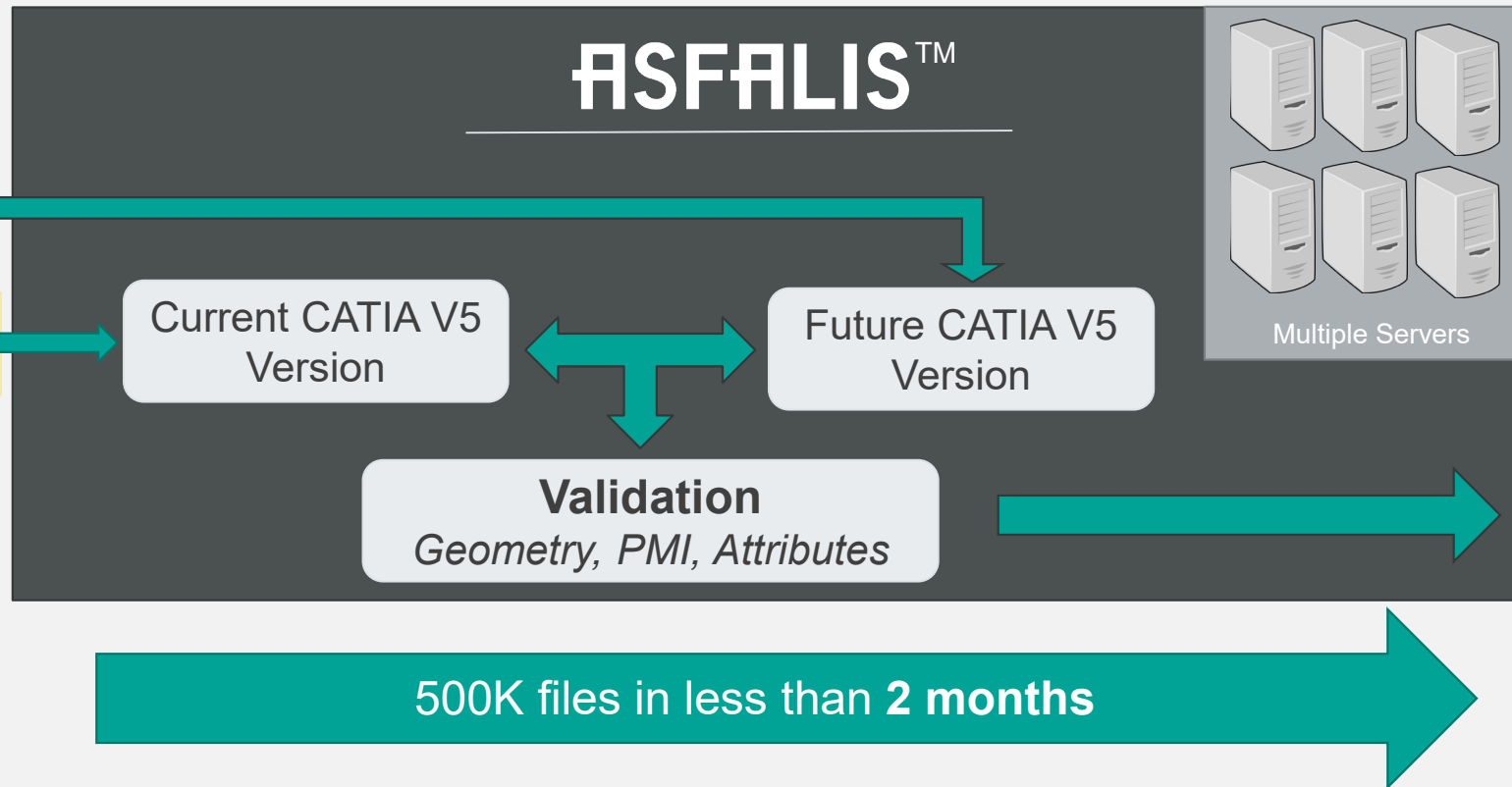


CAD VERSION UP VALIDATION

Aerospace OEM



Current CATIA
V5 Version



Deliverables & Outputs



Machine
Readable
Summary
Reports



Validation
Reports



THANK You



RENAULT SPORT
FORMULA ONE TEAM

TECHNICAL PARTNER

TECHНИСАГ ПАРТНЕР