# Migrate Your CAD Data Successfully

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# Elysium



- **Founded : 1984**
- **Employees : 95 (56 in R&D)**
- **Core Competencies:**
  - **Data Translation**
  - **Geometry Healing**
  - **Data Quality Management**
  - **Simplification**
- **Off-the-Shelf, OEM, & Migration Services**

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# Locations

**North America**
Southfield, MI
Huntington Beach, CA

**Europe**
Paris, France

**Global HQ / Asia**
Hamamatsu, Japan



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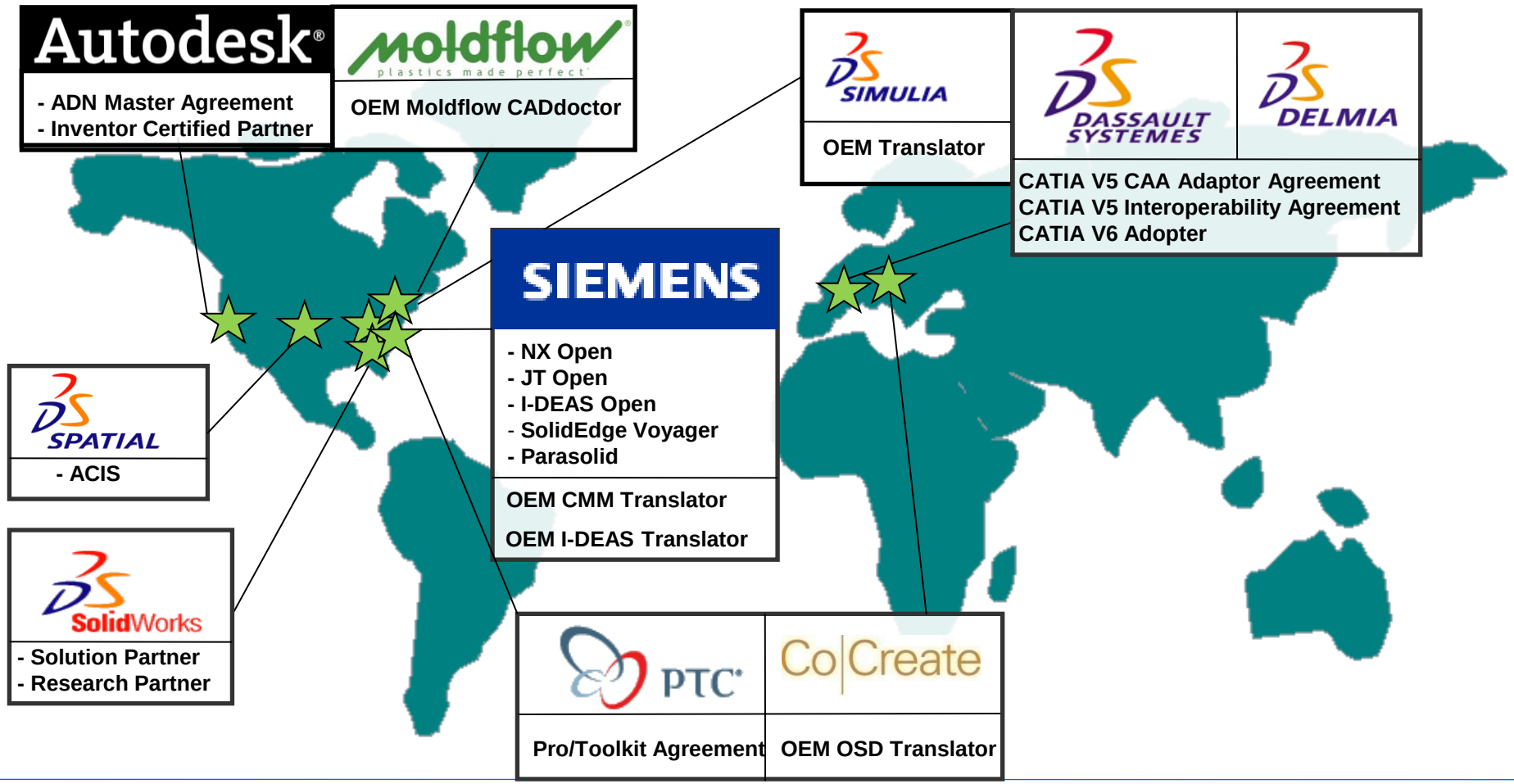
# Partnerships



Elysium keeps expert knowledge of all major CAD systems via official partnerships with all major vendors.



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# Goals



- **Preserve the investment made in the legacy data**
- **Promote current CAD lifecycle**
- **Maximize skillset of already trained resources**
- **Lower the cost of conversion to a new CAD system**
- **Migrate data accurately**
- **Migrate data that is usable for the desired scenarios**


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# Process Steps



- **Identify** the data to be migrated and lock it in the source system to prevent modification during the migration process
- **Migrate** legacy data sets to new CAD data sets
- **Approve** new data sets for use after completing repair. The migrated revision should be locked as “read-only” and preserved as a record of the migration process. A new revision will be created for any future change.



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# Identity - Customer Audit



- **Customer background**
  - **Company overview**
  - **CAD usage information**
- **Data management analysis**
  - **Audit your CAD data and perform statistical analysis to predict migration results**
- **Part, assembly, and drawing analysis**
  - **Estimate pass rates**
- **Conclusions**
  - **Basis for discussion to develop business and technical migration plan**
  - **Highlight any special situations**
  - **On-site for typically 2-3 days**



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# Identify - Understanding Migration Advantage



| Classification | Grouping | Migration Target | Migration Time | QA | Post Migration |
|---|---|---|---|---|---|
| Legacy Part | 50-70% | STEP, JT | N/A | NO | Reference Only. Migrate Later |
| Regular Part | 50-90% | B-rep | Fast | YES | Use direct editing. Option to migrate to features later |
| Active Part | 5-20% | Features | ~2.5*Part Replay | YES | Part Repair |



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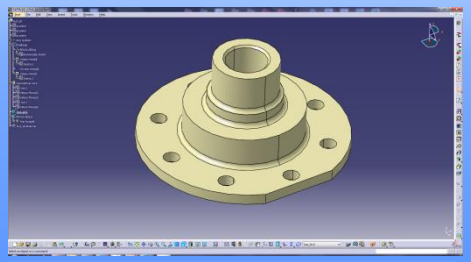
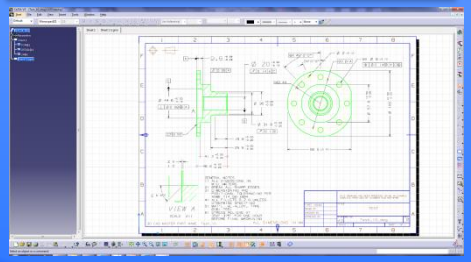
# CADfeature

Global Product Data Interoperability Summit | **2014**

Source



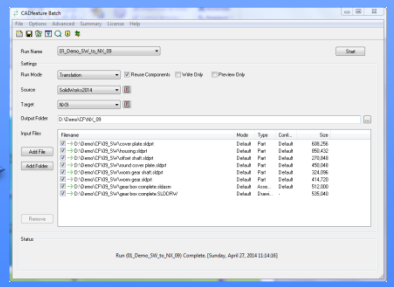
Plug-in (Capturer)



3D

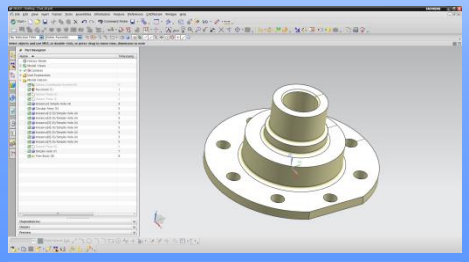
2D

Translation

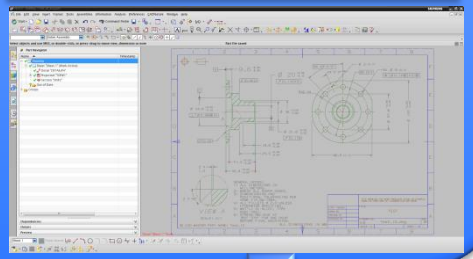


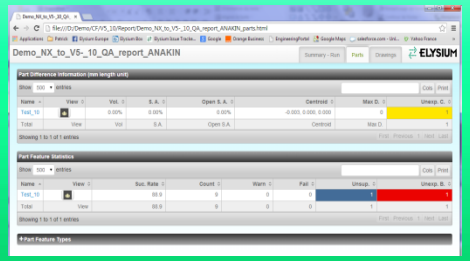
Neutral File

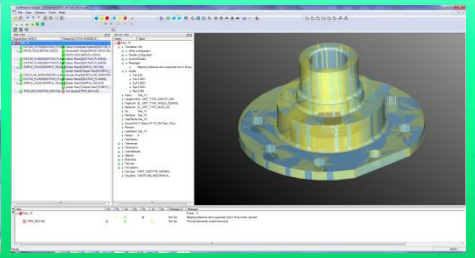
Target



Plug-in (Builder)





QA Reports

QA & Validation



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# Identity using CADfeature



- **Batch Processing with or without UI**
- **Audit Tool**
- **Data mining and success rate forecast**



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# Migrate using CADfeature



- **Part, assembly and drawing**
- **Component reuse**
- **Standard part mapping**
- **Attribute mapping**
- **3D PMI**
- **Brep, Feature or both**
- **Associative or static drawing**



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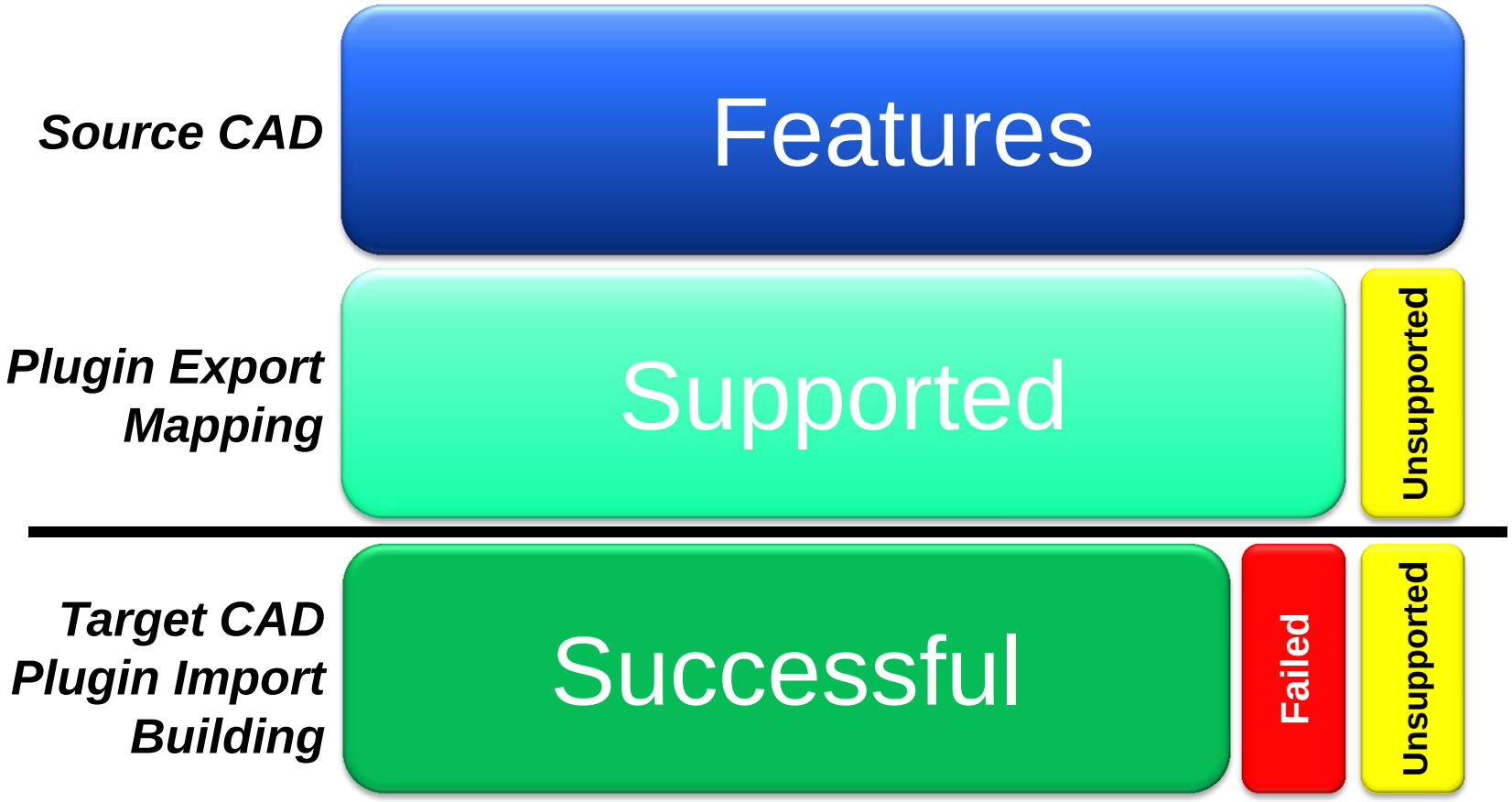
# The Technical Challenge





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# Approve using CADfeature



- **Part fidelity checks**
  - **Volume, surface area, centroid, and point cloud**
  - **Exhaustive  geometry checks with CADdoctor GVT**
  - **Curve length**
- **Assembly fidelity checks**
  - **Total Volume, surface area, centroid**
  - **Instance location checks**
- **Drawing**
  - **Sheet counts and sizes**
  - **View counts, locations, borders and geometry score**
- **2D & 3D PMI**



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# QA



- **Raw XML QA report**
- **HTML with WebGL QA report**
- **CADfeature Viewer, CADdoctor GVT**
- **Dynamic QA (Display QA during rework)**


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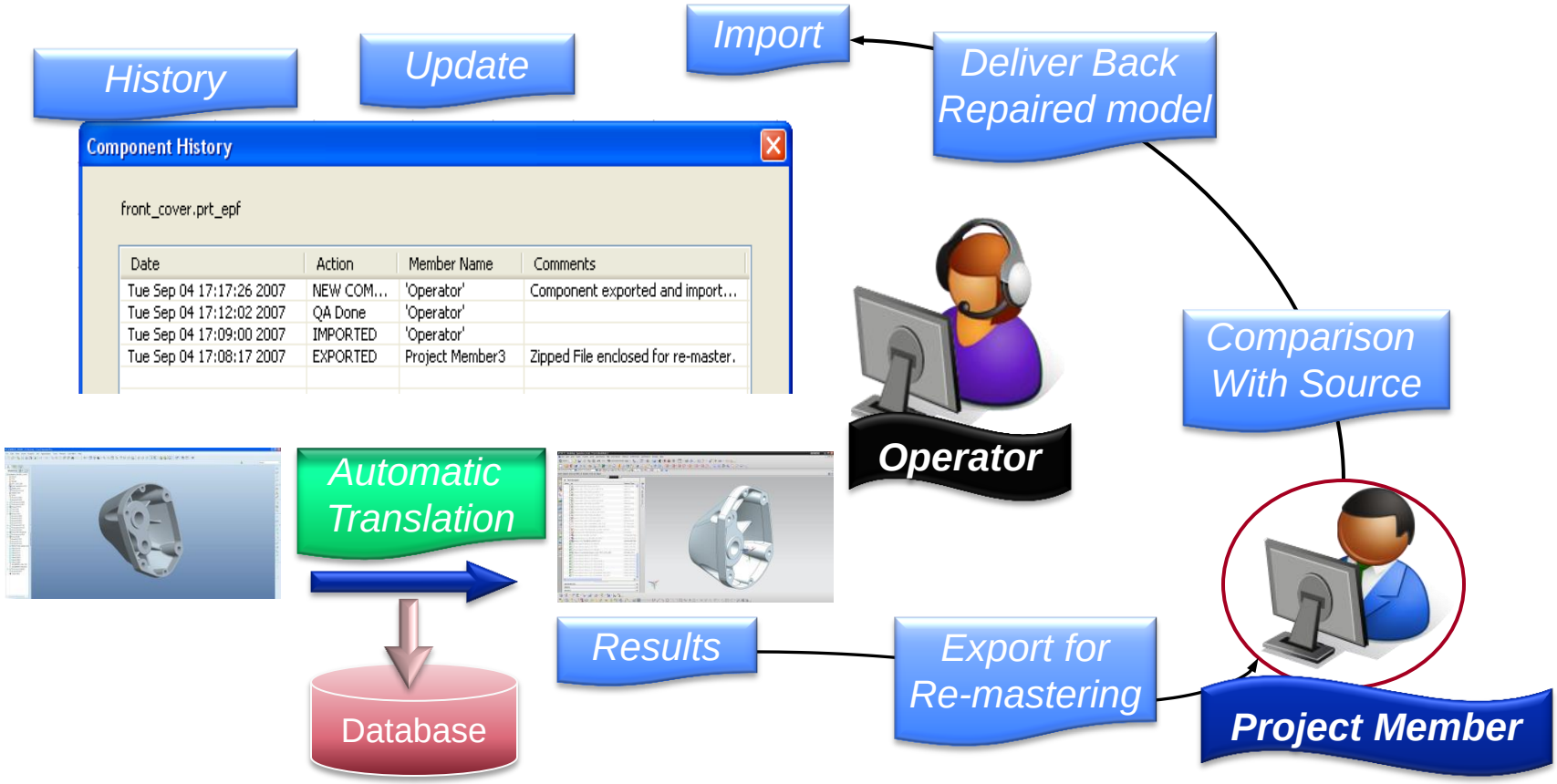
# Re-Master Process Management



- **Repair of translated data while preserving the associative links**



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# Technology Demonstration



- **Translation**
- **QA Report**
- **Re-master tools**


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