

### FAST FEEDBACK FROM THE FIELD

In the traditional manufacturer/customer relationship, the manufacturer delivers a product to the customer and the customer's employees maintain and modify the equipment during its lifecycle. Feedback information is unstructured and difficult to store and analyze. Information about operation, maintenance and repair of the equipment—though sometimes mandatory—is collected by customers in an ad hoc way.

Cortona3D RapidTag is the first tagging enterprise solution that allows users in the field to attach operational information to parts/assemblies and feed it back to a central data repository for analysis and troubleshooting.

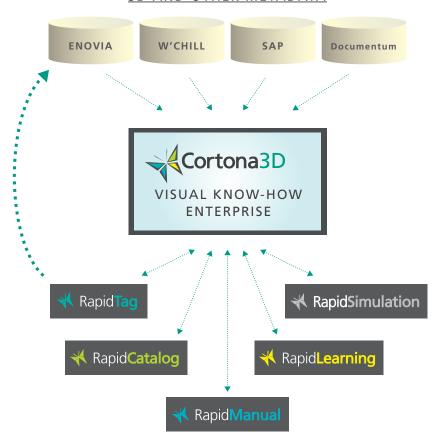
# STRUCTURED FEEDBACK STORED CENTRALLY FOR ANALYSES

- **3D Data Repurpose Layer:** CAD data is repurposed and customer-specific metadata, or part metadata, is modified.
- End User Application Layer: Provides the user interface to the 3D and allows metadata to be attached or linked to the 3D parts data.

## THE IMPACT IS POWERFUL!

A wide variety of use cases can be identified where data communication between end users and manufacturers can add value and provide significant revenue opportunities as well as cost savings through improved efficiencies.

#### 3D AND OTHER METADATA



#### RENEFITS AT A GLANCE

- Product innovations and enhancements, geared specifically to market requirements, are enabled due to real-time user feedback to product development.
- Collaborate, analyze and troubleshoot information gathered from all users.
- **Structured feedback** of information, ie: equipment parts/assemblies, from users in a set format.
- **Central repository** for all feedback from multiple users.

#### WHO USES OUR PRODUCTS?

- Airbus
- ABB
- Oracle
- NIST
- BMW
- US Army
- Sukhoi
- Boeing
- Ford
- NASA



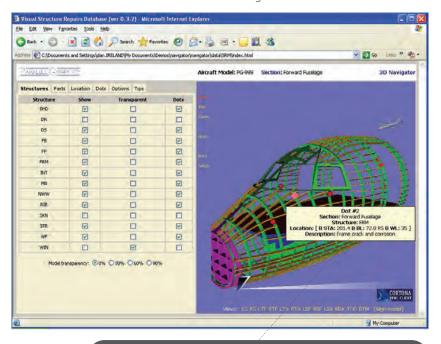
What's the result? This 3D visualization provides a much more intuitive and natural way to record operational or maintenance-related data, which can be fed back to the manufacturer and ultimately its design engineers. The end user can interact with the 3D model and pinpoint information to a specific location.

#### **HOW IT WORKS**

## Visual Feedback of Information Associated with Parts/Assemblies from Users in the Field

The interface consists of a 3D visualization that allows for easy navigation, zooming in on individual parts, or rolling over parts to identify them. Pre-set viewpoints can be used to orient the 3D model. Different structural elements can be turned 'on' or 'off' or made transparent to give better locator information.

- User attaches a marker to a specific location on a part
- Additional metadata relevant to the part can be displayed
- User chooses the type of tag (temporary, permanent, etc.) using different icons or colored shapes
- User can add and modify any additional metadata as well as attach supporting documents, pictures, etc.
- User can search via various filters for other tags and view associated data



Users can attach feedback to specific parts/assemblies in the 3D object. This data goes to central repository for analysis and troubleshooting.

#### **BOEING ON CORTONA3D TECHNOLOGY**

Boeing is the world's largest manufacturer of commercial jetliners and military aircraft.

"We are delighted with the response of our customers to the visualization technology provided by Cortona3D. We look forward to development of further 3D-powered solutions for our airline customers."

Freelon Hunter
Director of Maintenance Services
Product Development,
Boeing Commercial Aviation Services



#### **FEATURES**

- No 3D or CAD expertise required
- ISO open standard enables seamless integration with other applications
- Lightweight format for delivery over the Web, intranet, using laptops or Pocket PCs
- Intellectual Property is protected as optimized CAD data cannot be re-engineered
- Integrates into existing work processes
- 'Dynamic update' ensures that changes are easy to upload and reflected in all materials

#### SYSTEM RECOMMENDATIONS

- 1.5 GHz microprocessor or higher RAM: 512 MB
- Windows 2000 SP2 or Windows XP,
   Internet Explorer v. 6.0 and DirectX 7
- Additional software: Microsoft XML Core Services (MSXML) 4.0



**Cortona3D** provides 3D visual knowledge software to streamline the authoring of technical communications. **Cortona3D** open standards authoring tools give subject matter experts the power to create interactive, animated 3D product documentation such as maintenance manuals, parts catalogs and interactive training from existing CAD assets rapidly. Proven benefits are three times faster production, 60% cost savings, and improved quality. Customers include Boeing, Ford, GE, Bosch, ESA and Airbus.