

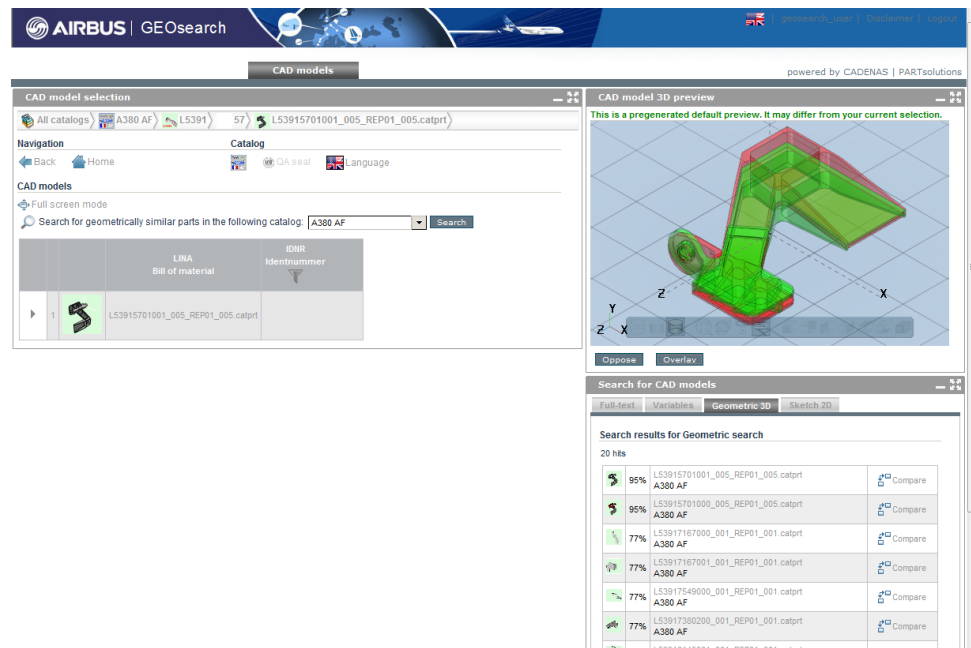
# CADENAS GEOsearch WEB Portal

## for Extended Enterprise

## Project Report and Live Demo

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 Moritz Kürten  
 PLM Consultant

19. Februar 2012



www.cenit.de  
 www.cenit-group.com

# Agenda

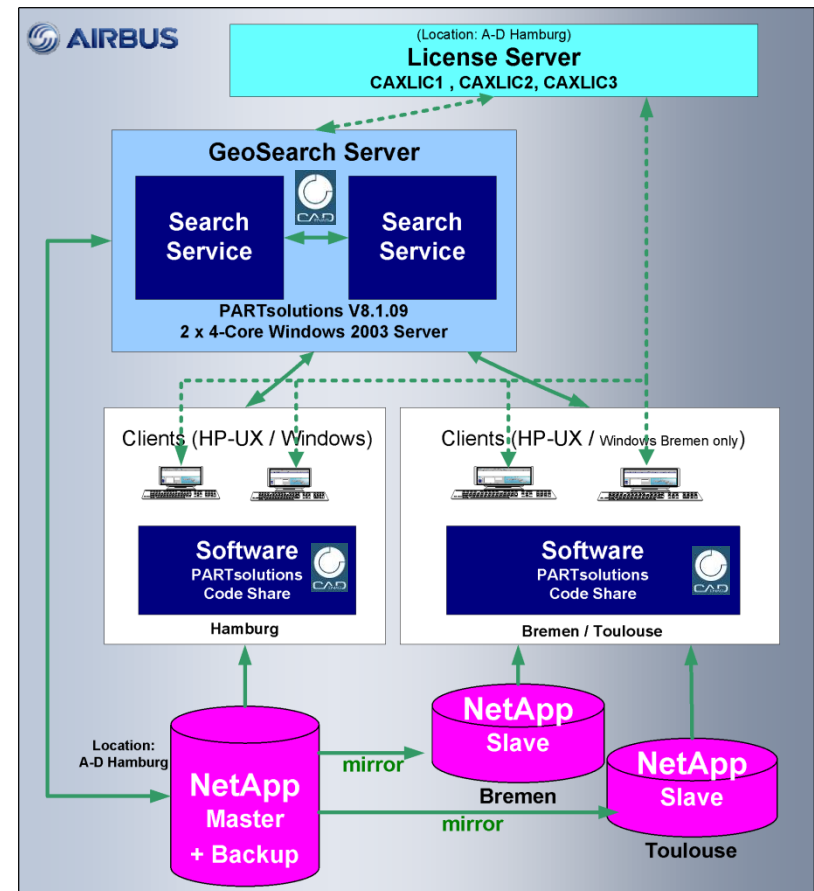
- **Project Background and Scope**
- Requirements
- Target Solution
- Live Demo: CADENAS GEOsearch WEB Portal
- Project Status
- CENIT AG

# *Project Background and Scope*

- **A geometric search tool can**
  - Increase the part reuse rate
    - Existing parts can be reused
  - Reduce development and manufacturing lead time
    - Faster design by reuse or small modification
    - Faster release process
    - Manufacturing with existing tools
  - Reduce process costs
    - Design process
    - Release process
    - Manufacturing
    - Data Warehousing
    - Spare Part management

# Project Background and Scope

- 1<sup>st</sup> Customer Project 2007/2008
  - CADENAS GEOsearch installation in heterogenic environment (HP-UX/WIN32)
  - Client-server environment with
    - central search server
    - Windows and HP-UX client
  - Usage for two aircraft programs
    - A380
    - A400M

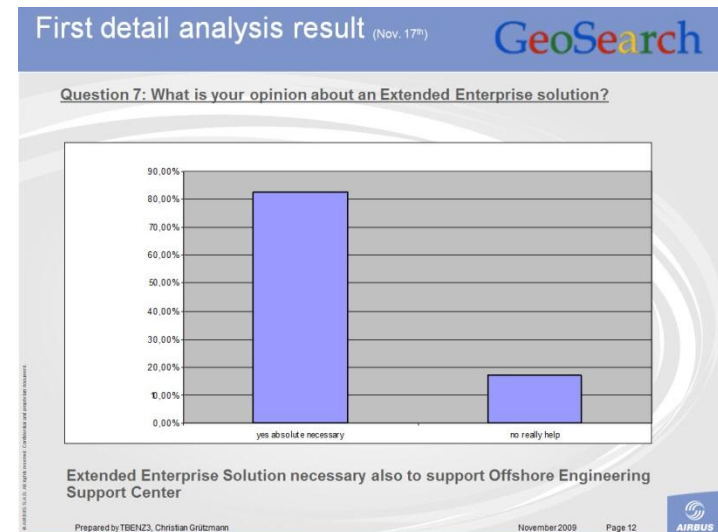
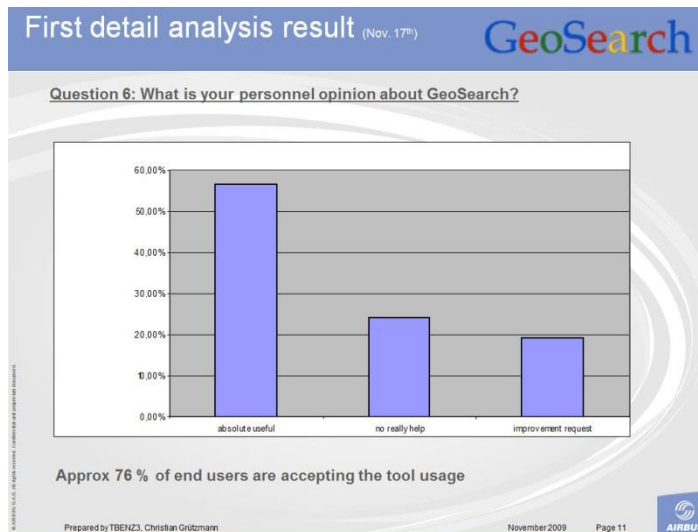


# Project Background and Scope



- User Survey

- A user survey after the first year of usage resulted that the calculated savings could be realized!
- A Extended Enterprise solution is highly requested

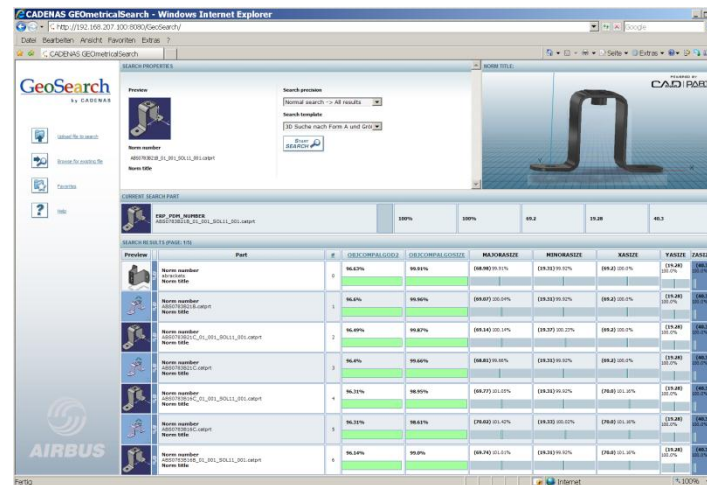


# Project Background and Scope

- Decision December 2010
  - Development and Deployment of an
 

## GEOsearch for EE WEB Portal
  - Target:
 

## Provide access to GEOsearch data base for external supplier



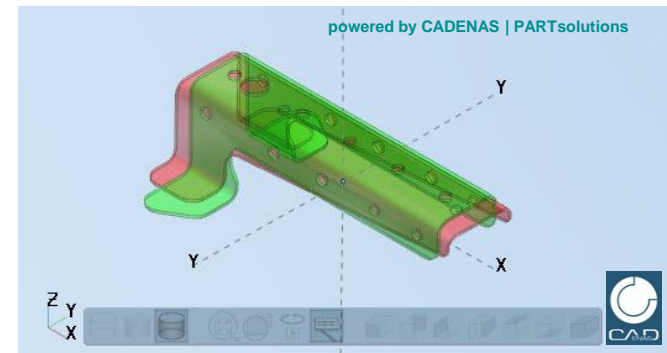
CADENAS GEOsearch WEB Portal prototype (2009)

# Agenda

- Project Background and Scope
- **Requirements**
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# Requirements

- **Functional Requirements**
  - Usage of the same data base like the existing internal solution
  - 3D Overlay of search master and search result
    - to compare shape and size
  - Access from Airbus Supply SPAN (WWW)





# Requirements

- **Security Requirements**
  - Compatibility to Airbus Supply SPAN Portal
- **Data Security**
  - Single Sign On mechanisms
    - Siteminder CA Technologies
  - Reverse Proxy configuration

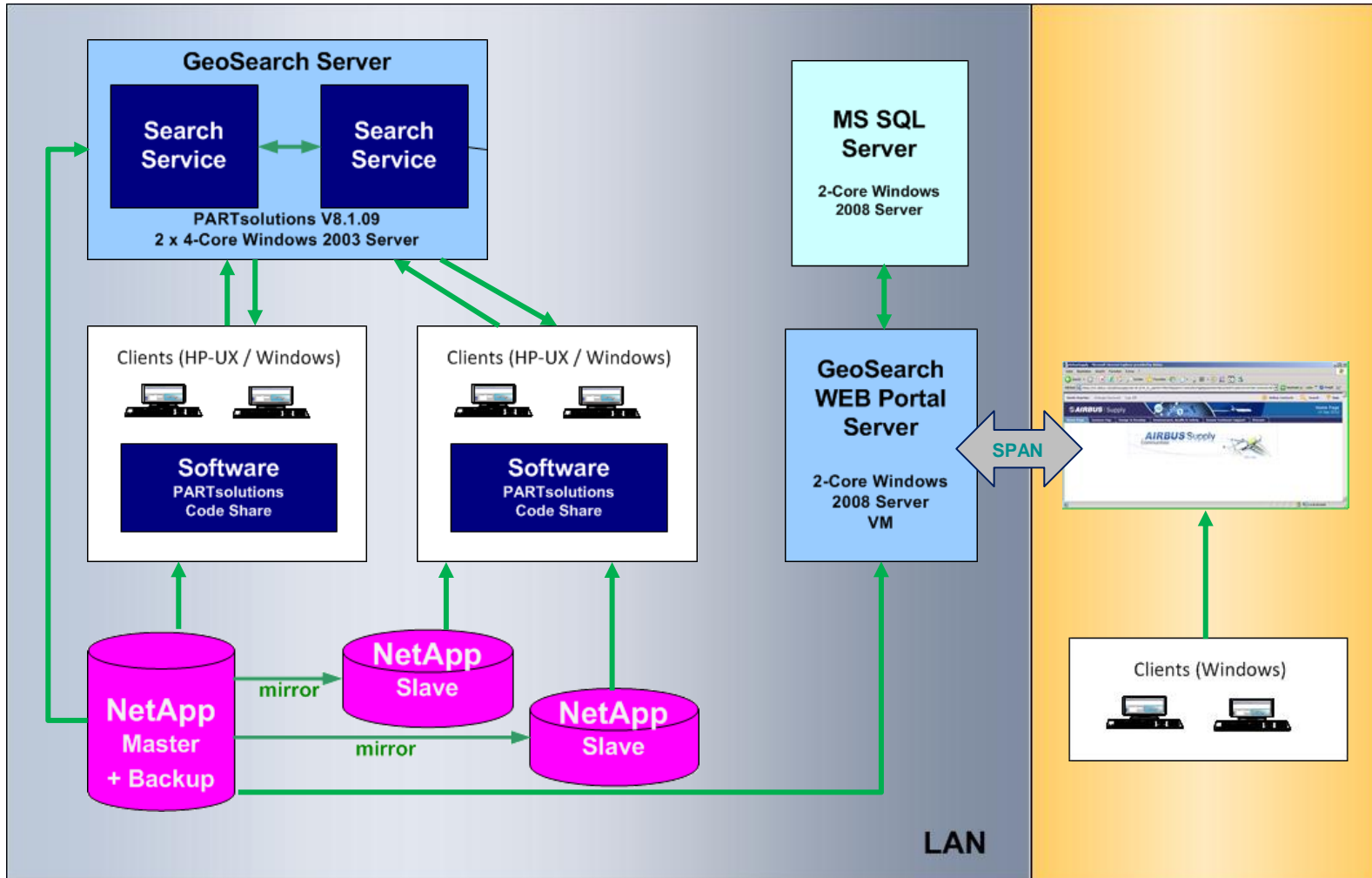
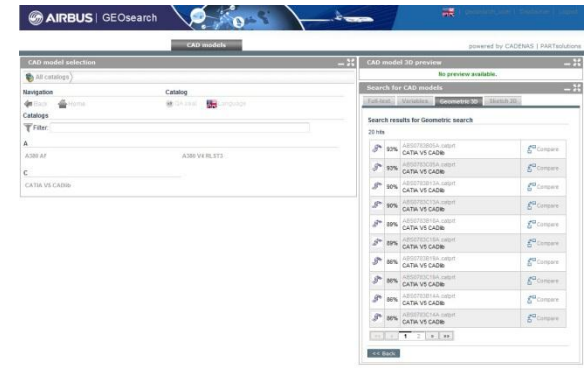
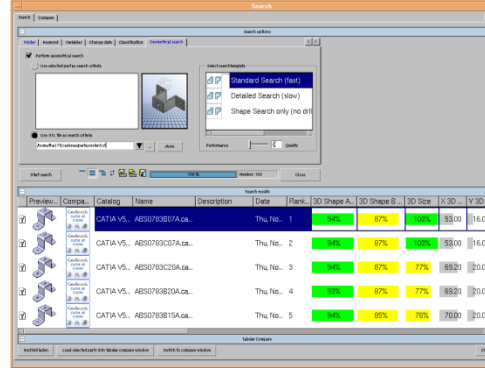


# Agenda

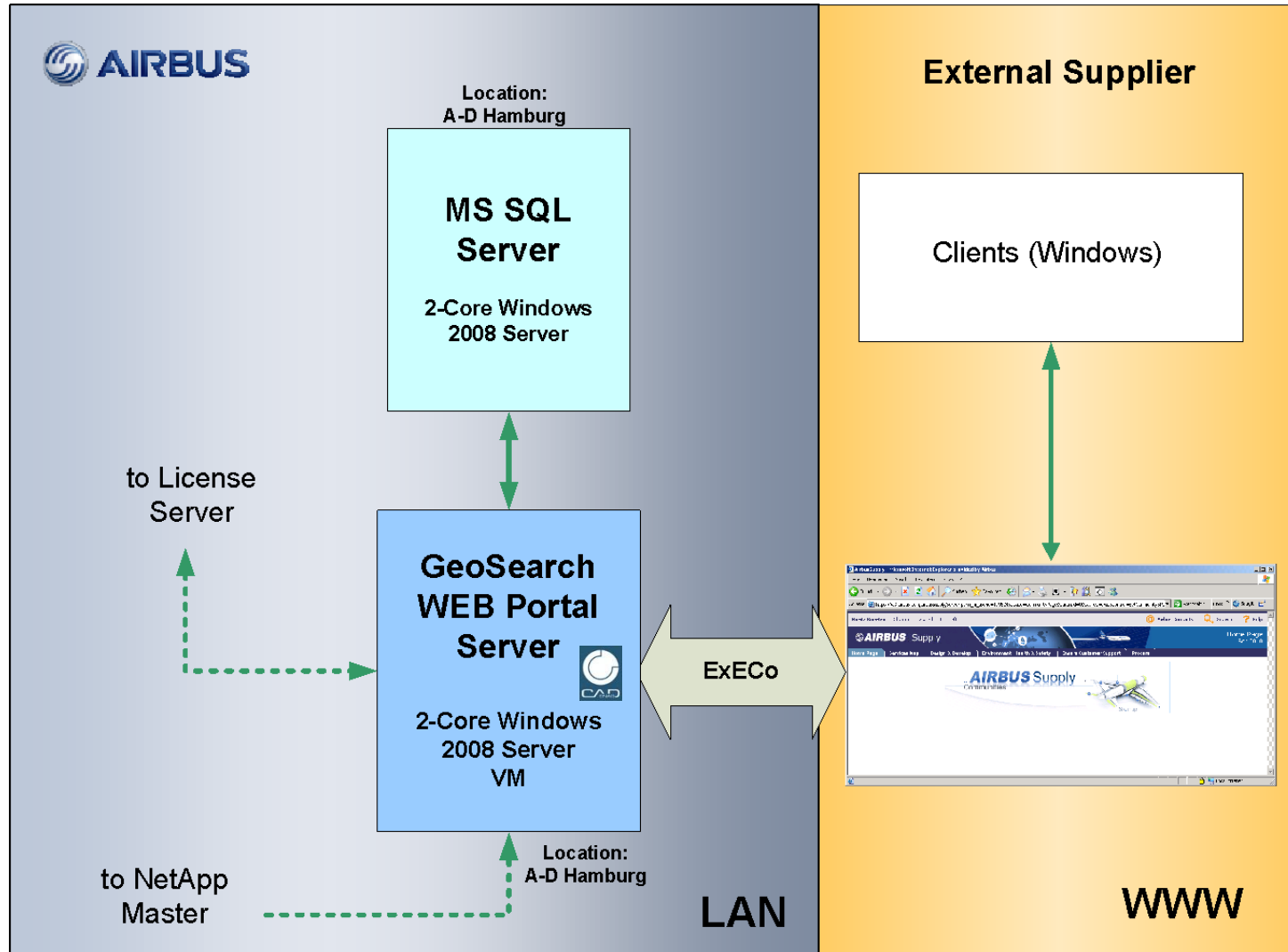
- Project Background and Scope
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# Target Solution

- Target Environment

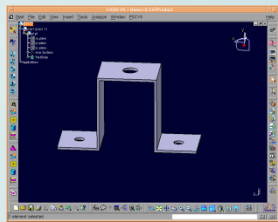


# Target Solution



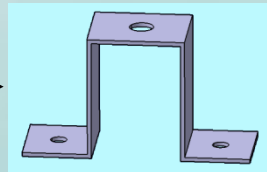
# Target Solution

- Standard Use Case for Extended Enterprise



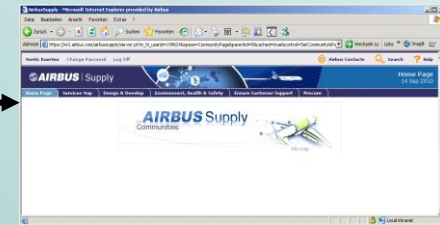
Supplier designs search part

Export to STL



STL file

Upload STL to Airbus Supply SPAN GEOsearch WEB Portal



Execute Search and view search results



Copy file name


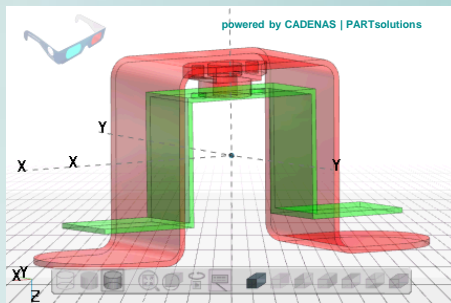
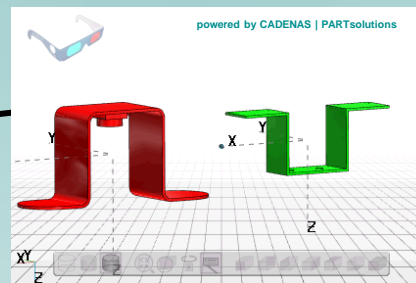
		LIINA Bill of material	IDNR Identnummer	PARTNUMBER PartNumber	NUT NUT	TH Th [mm]	A A [mm]	B B [mm]	D1 D1 [mm]	D2 D2 [mm]	H H [mm]	L1 L1 [mm]	L2 L2 [mm]	L3 L3 [mm]	R1 R1 [mm]
1		ABS0783B07A.catprt		ABS0783B07A	0.000	4.826	1.200	16.000	5.100	3.300	25.000	53.000	37.000	21.000	3.000

Table of Variables



3D Overlay



3D Oppose view

# Agenda

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# GEOsearch WEB Portal

The screenshot displays the GEOsearch WEB Portal interface. At the top, there is a header with the AIRBUS | GEOsearch logo and user information (geosearch\_user | Disclaimer | Logout). Below the header, the page is titled 'CAD models' and is powered by CADENAS | PARTsolutions. The main content area is divided into two columns. The left column, titled 'CAD model selection', contains a navigation menu with 'Back' and 'Home' buttons, a 'Catalog' section with 'QA seal' and 'language' options, and a 'Filter' input field. Below the filter, there is a list of catalogs: 'A' (containing 'A380 AF' and 'A380 V4 RLST3') and 'C' (containing 'CATIA V5 CADlib'). The right column, titled 'CAD model 3D preview', shows 'No preview available.' Below this is a 'Search for CAD models' section with four tabs: 'Full-text', 'Variables', 'Geometric 3D', and 'Sketch 2D'. The 'Full-text' tab is highlighted with a red box. Below the tabs, there is an 'Order number search' section with a 'Catalog' dropdown menu (set to 'All catalogs') and a 'Criteria' section with a 'Search text' input field and a 'Search' button. A red arrow points from the 'Full-text' tab to the 'A' catalog section.

- **Catalog selection**
  - Browse through the catalog content
- **Search Functions**
  - Full Text
  - Variables
  - Geometric 3D
  - Sketch 2D

# GEOsearch WEB Portal

The screenshot displays the GEOsearch WEB Portal interface. At the top, there is a header with the AIRBUS | GEOsearch logo on the left and user information (geosearch\_user | Disclaimer | Logout) on the right. Below the header, a navigation bar contains 'CAD models' and 'powered by CADENAS | PARTsolutions'. The main content area is divided into two panels: 'CAD model selection' on the left and 'CAD model 3D preview' on the right. The 'CAD model selection' panel includes a search bar, navigation buttons (Back, Home), and a 'Catalog' dropdown. A file selection dialog is overlaid on this panel, showing a list of files in a 'demo' folder. The file 'Part2.stl' is selected, and a red arrow points from the 'Select file...' button in the 'Sample data upload' section of the 'CAD model 3D preview' panel to this file. The 'CAD model 3D preview' panel shows 'No preview available.' and a search bar with 'CATIA V5 CADlib' selected. Below the search bar is a 'Sample data upload' section with a 'Select file...' button and a 'Search' button.

**CAD model selection**

All catalogs

Navigation: Back, Home

Catalog: QA seal, language

Filter:

Suchen in: demo

Name	Änderungsdatum	Typ
L-Winkel.stl	17.05.2011 08:34	Zertifikatvert
M5396650127400.stl	11.09.2007 14:03	Zertifikatvert
Omega-Part.stl	20.10.2009 09:13	Zertifikatvert
Omega-Part-mit-Bohrung.stl	27.07.2007 11:07	Zertifikatvert
Omega-Part-mit-Bohrung2.stl	11.09.2007 12:48	Zertifikatvert
Omega-Part-mit-Bohrung7.stl	20.10.2009 09:13	Zertifikatvert
Part1.stl	20.10.2009 09:13	Zertifikatvert
Part2.stl	20.10.2009 09:13	Zertifikatvert
T53920842200.stl	06.12.2012 10:18	Zertifikatvert
T53924400200.stl	21.09.2012 09:14	Zertifikatvert
V924746452.stl	11.07.2012 08:46	Zertifikatvert
V9247373875.stl	11.07.2012 08:45	Zertifikatvert
VQ241219620100.stl	05.06.2012 10:24	Zertifikatvert

Dateiname: Part2.stl (Offnen)

Dateityp: \*.stl (Abbrechen)

**CAD model 3D preview**

No preview available.

Search for CAD models: Full-text, Variables, Geometric 3D, Sketch 2D

Catalog: CATIA V5 CADlib

Sample data upload: Select file...

Search

- Geometric Search 3D
  - STL file upload



# GEOsearch WEB Portal

| GEOsearch

 | [geosearch\\_user](#) | [Disclaimer](#) | [Logout](#)

CAD models
powered by CADENAS | PARTsolutions

CAD model selection

All catalogs

Navigation

[Back](#) [Home](#)

Catalog

QA seal language

Catalogs

Filter:

**A**

A380 AF A380 V4 RLST3

**C**

CATIA V5 CADlib

CAD model 3D preview

No preview available.

Search for CAD models

Full-text Variables **Geometric 3D** Sketch 2D

Search results for Geometric search

20 hits

	86%	ABS0783B07A.catprt CATIA V5 CADlib	
	86%	ABS0783C07A.catprt CATIA V5 CADlib	
	84%	ABS0783B20A.catprt CATIA V5 CADlib	
	84%	ABS0783C20A.catprt CATIA V5 CADlib	
	84%	ABS0783B15A.catprt CATIA V5 CADlib	
	84%	ABS0783C15A.catprt CATIA V5 CADlib	
	83%	ABS0783B08A.catprt CATIA V5 CADlib	
	83%	ABS0783C08A.catprt CATIA V5 CADlib	
	82%	ABS0783B15B.catprt CATIA V5 CADlib	
	82%	ABS0783C15B.catprt CATIA V5 CADlib	

[Back](#)

- **Search Result**
  - Ranked by grade of similarity
  - Preview Bitmap
  - Compare function

# GEOsearch WEB Portal

GEOsearch

 | [geosearch\\_user](#) | [Disclaimer](#) | [Logout](#)

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**CAD models**
powered by CADENAS | PARTsolutions

**CAD model selection**

[All catalogs](#) > [CATIA V5 CADlib](#) > [ABS](#) > [abs0783](#) > [ABS0783B20A.catprt](#)

**Navigation**

[Back](#) [Home](#)

**CAD models**

[Full screen mode](#)

Search for geometrically similar parts in the following catalog: CATIA V5 CADlib [Search](#)

	LINA Bill of material	IDNR Identnummer	PARTNUMBER PartNumber	NUT NUT	TH Th [mm]	A A [mm]	B B [mm]	D1 D1 [mm]	D2 D2 [mm]	H H [mm]
1	ABS0783B20A.catprt		ABS0783B20A	0.000	4.826	1.600	20.000	5.100	5.100	30.00

**CAD model 3D preview**

This is a pregenerated default preview. It may differ from your current selection.

[Oppose](#) [Overlay](#)

**Search for CAD models**

[Full-text](#) [Variables](#) [Geometric 3D](#) [Sketch 2D](#)

**Search results for Geometric search**

20 hits

	86%	ABS0783B07A.catprt CATIA V5 CADlib	<a href="#">Compare</a>
	86%	ABS0783C07A.catprt CATIA V5 CADlib	<a href="#">Compare</a>
	84%	ABS0783B20A.catprt CATIA V5 CADlib	<a href="#">Compare</a>
	84%	ABS0783C20A.catprt CATIA V5 CADlib	<a href="#">Compare</a>

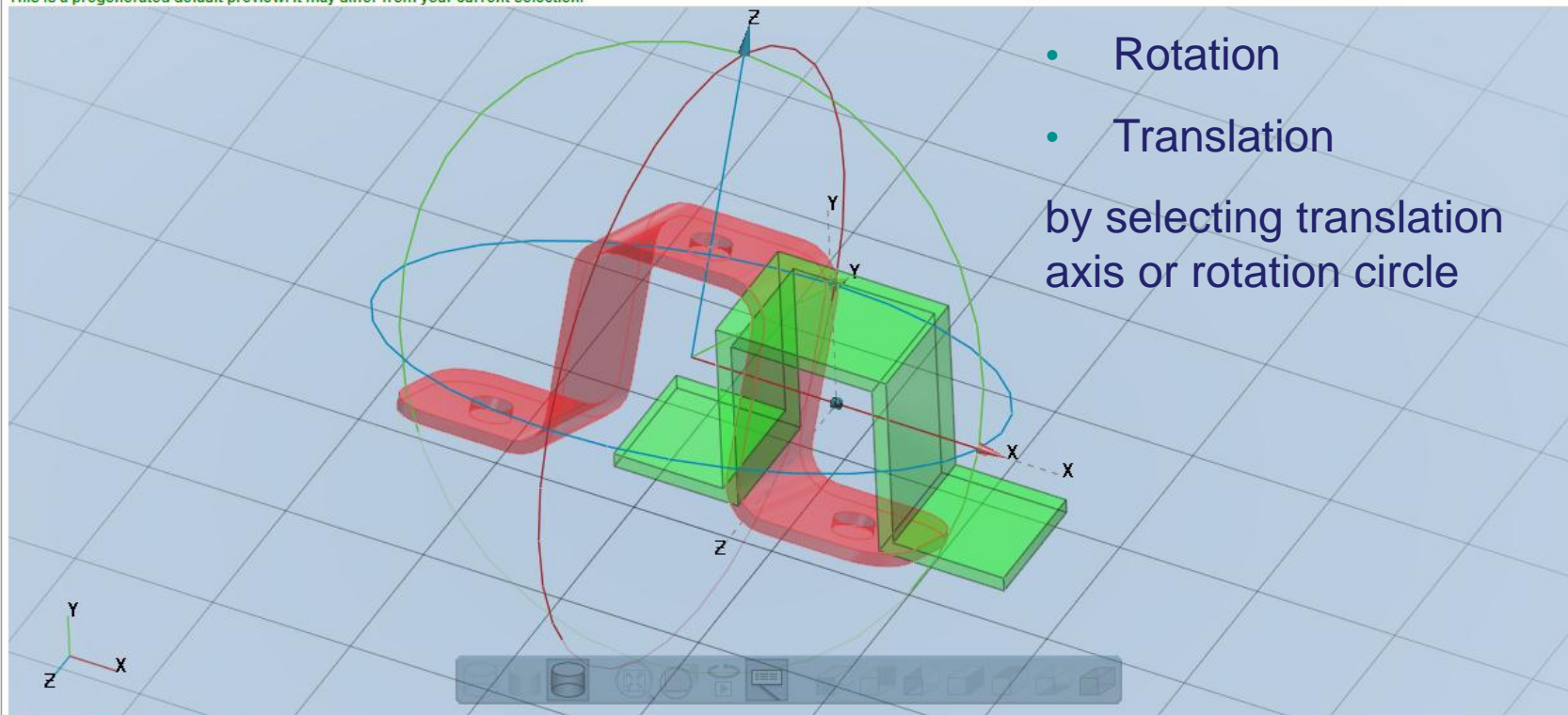
- **3D Viewer**

- Overlay View
- Oppose View
- Compare Size and shape

# GEOsearch WEB Portal

CAD model 3D preview

This is a pregenerated default preview. It may differ from your current selection.



- Rotation
  - Translation
- by selecting translation axis or rotation circle

Oppose Overlay

Powered by CADENAS

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# Project Status

- **GEOsearch for EE WEB Portal**
  - Go live in September 2012
  - Ramp-up phase until mid of 2013
  
- **GEOsearch for A380 (Airbus internal)**
  - Switch from HP-UX to Windows 7 / CATIA V5 R21 in 2013
  - Release change from PARTsolutions 8.1.09 to 9.05 until end of 2013

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- **CENIT AG**

# CENIT AG

- **Airbus 1st tier supplier  
in cooperation with CenProCS AIRliance**
  
- **Responsible in this project for**
  - Infrastructure project lead
  - Software test & installation
  - Bug management
  - Customization
  - Maintenance
  - Data import / management



***Herzlichen Dank für  
Ihre Aufmerksamkeit***

**© CENIT AG  
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