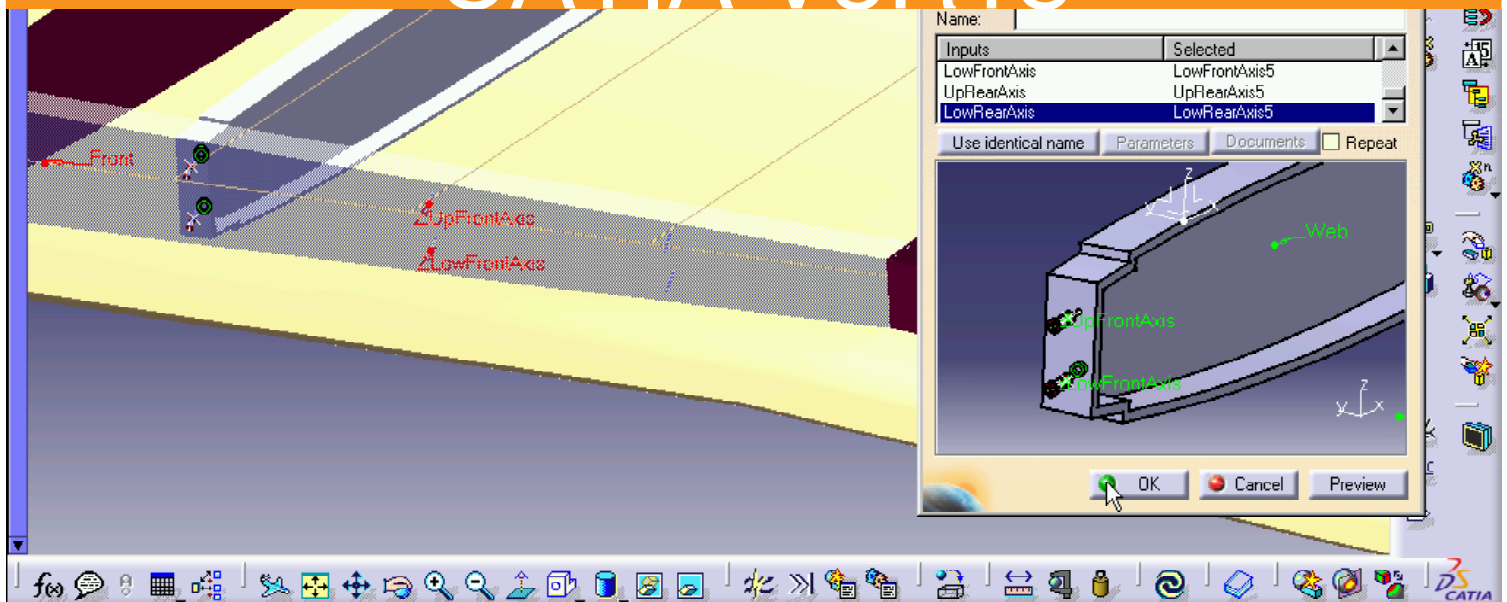


Product Synthesis

# CATIA - Product Knowledge Template 1 (KT1)

## CATIA V5R18





## Product Synthesis

# CATIA - Product Knowledge Template

Allow for the maximum reuse of secured intelligent feature, part and assembly templates created using CATIA Product Knowledge Template 2.

### Product overview

CATIA - Product Knowledge Template 1 (KT1) allows the instancing of feature, part and assembly templates, created using CATIA - Product Knowledge Templates 2 (PKT), and their modification through the use of appropriate input values and geometry references. The powerful features of CATIA Version 5 allow the intelligence built into such templates to be highly adaptive to its usage context.

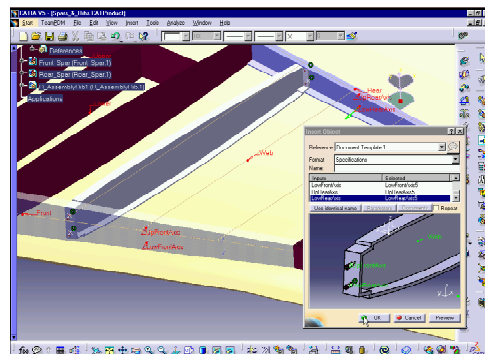
Instances of these templates also take advantage of the CATIA Catalog infrastructure to allow easy access to templates references.

In the extended enterprise, this allows other groups to re-use knowledge encapsulated within such templates through the application of best practices. At the same time, it restricts their ability to fully examine the intellectual capital, protecting the know-how of the creating organization while still facilitating its reuse.

This significantly improves design productivity and can promote standardization of design methodology.

CATIA - Product Knowledge Template 1 (KT1) fits the needs of all types of designers in all industries.

The Product Knowledge Template solution consists of a buildtime product, CATIA - Product Knowledge Template 2 (PKT), and a runtime solution, CATIA - Product Knowledge



Template 1 (KT1).

### Product Highlights

- Maximizes design and know-how re-use.
- Deploys best practices.
- Protects intellectual assets.

### Product Key Customers Benefits

#### Maximizes design and know-how re-use...

CATIA - Product Knowledge Template 1 (KT1) provides designers and design engineers across projects many simple re-use scenarios for designs and methodologies. This is achieved through the use of intelligent Product Knowledge Templates defined within CATIA - Product Knowledge Template 2 (PKT).

Part and assembly templates are instantiated in context and automatically created. During the instancing, the user is asked to select new geometry or parameter. Once the input specifications are defined, they are generated

in the specification tree and the relevant geometry is created in context.

Part and assembly templates are adaptive. Instancing and generation consider the intelligence built into the template when adapting the result to its usage context. This allows rules to dictate the configuration of the resulting feature based on the input parameters and geometry references.

The generated templates retain their intelligence within the tree specification. Hence, any modification to the input parameters or geometric references, as the design matures, are immediately taken into account within the template. The regeneration will adapt the feature to the new input conditions. These changes could be manual values entered by the user for the feature or propagated from other elements of the design.

#### **Deploys best practices...**

Once defined, these intelligent, adaptive templates can be shared across the extended enterprise through catalogs. These templates can be as well managed within the Engineering Hub, through ENOVIA V5 VPM, giving users all the power of our PLM solution in terms of data management, collaboration and concurrent engineering. The deployment of templates supports the propagation of standardized design methodologies and corporate know-how, providing designers with timely, direct access to parts and assembly libraries, a valuable asset, during the conceptual phase. This ensures the use of corporate best practices and substantially accelerates the design-to-manufacture process for new products .

#### **Protects intellectual asset (\*)...**

Using this capability, the complexity of specifications and details of the design methodologies can be hidden from eventual end users behind the template. This simplifies the reuse of highly sophisticated design methodologies or processes without losing the benefits of the embedded rules, checks and formulas.

#### **Allows use of scripting templates for a powerful solution...**

CATIA - Product Knowledge Template 1 (KT1) enables the use of scripting templates defined within CATIA - Product Knowledge Template 2 (PKT) for automate tasks such as the generation of smart parts in the product creation process. This helps to ensure the enforcement of best practices and improved design productivity, by automating the product creation process.

Product Knowledge Template 1- provides significant ease of use, productivity and communication benefits when designing products that incorporate complex features. This allows the reuse of sophisticated components and incorporation of adaptive rules, without needing to understand the internal complexities of the feature. The single entity representation of an instantiated template simplifies the view of the product specification and allows sharing of sophisticated capability across the extended enterprise, while protecting the intellectual capital that has been used to create it.

(\*)Currently, only the feature templates provide Intellectual Property protection.

## ABOUT CATIA V5R18

CATIA is Dassault Systemes' PLM solution for digital product definition and simulation.

**[plm.3ds.com/CATIA](http://plm.3ds.com/CATIA)**

