Conquer Complexity with Configit Ace®

Use the power of a Configuration Lifecycle Management (CLM) platform to manage and scale complex product configurations.
The Growing Complexity Challenge

Customer demands for customization and personalization are resulting in more complex products, systems and services. Thousands of potential product configurations need to be managed with the risk of errors due to duplication of the same information in multiple systems, as well as the risk of selling a solution to the customer that cannot be manufactured or delivered.

Configit Ace® is a vendor-agnostic, cloud-based Configuration Lifecycle Management (CLM) platform designed to integrate with any IT system. Configit Ace® enables an end-to-end, enterprise-wide configuration process for complex products, systems and services supporting design, development, manufacturing, sales and support.

With Configit Ace®, manufacturers and service providers can take back control with a scalable, reliable enterprise-grade platform that can provide a single-source-of-truth on product configuration information.
Flexible, modular CLM platform with open, reliable and secure APIs

Configit Ace® provides a scalable Configuration Lifecycle Management platform for modeling complex products, developing product configurator applications and synchronizing with other critical IT systems. Customers can choose their preferred starting point and select the modules that meet their immediate needs.

The Configit Ace® platform provides Graphical User Interfaces for modeling and verification, while a rich set of web-based APIs enable programmatic access to the full capabilities of Configit Ace®.
Complete End-to-End CLM Platform

Configit Ace® includes all the functionality required to model, test and analyze complex products, systems and services as well as the development resources and APIs required to build powerful product configuration applications. These capabilities are offered as modules with focused functionality that can be accessed via Graphical User Interfaces as well as APIs.

- **Model**
  - The Configit Ace® Model module provides rich modeling capabilities accessible via GUI or RESTful APIs.
  - Create intuitive rules based on logical expressions and conditional statements as well as run-time calculations.
  - Manage time-based availability of product models and features.
  - Model products, systems or services including system-level configuration.

- **Configure**
  - The Configit Ace® Configure module provides web-based APIs for product configuration and configuration pricing.
  - Developers of product configurator applications can use the Configure APIs to provide interactive configurators with immediate feedback on selection validity.
  - Analysis capabilities are also provided enabling product configuration errors to be highlighted with explanations that help guide users to the right choices.

- **Verify**
  - The Configit Ace® Verify module provides a complete test, debug and collaboration environment for modelers.
  - Modelers can use the Verify User Interface to build configurators to test and debug product models.
  - Feature applicability tests are created automatically, while custom tests can be designed by the modeler.
  - All product configurations can be tested, debugged and analyzed for all stored product models.

- **Design**
  - The Configit Ace® Design module includes plug-ins to market-leading 2D CAD tools SOLIDWORKS and Autodesk Inventor.
  - These CAD solutions can generate interactive 2D and 3D designs based on reliable product configuration information.
  - Developers of product configurators can integrate Unity Forge 3D visualization where product configurations can be displayed in 3D to assist and guide users.
Getting Started with Configit Ace®
Choose your starting point and expand in a phased approach

1. Address a specific challenge in either engineering, sales, manufacturing or post-sales/service activities

2. Build your product models using Configit Ace® or use the Ace® Rules Reuse Package to reuse existing product models and rules

3. Expand to scale configuration management capabilities of other IT systems and applications, such as PLM, ERP, CRM, and CPQ systems

4. Enable cross-functional collaboration using Configit Ace® Solution Space Analysis to optimize product portfolios and plan new offerings
A Single-Source-of-Truth for Configuration Information

Configit Ace® provides up-to-date, reliable product configuration information bringing value to multiple departments.

**Configit Ace®**
- **for Engineering**
  - Manage product complexity and scale with customer customization demands

- **for Sales**
  - Develop interactive product configurators and scalable, accurate CPQ solutions

- **for Manufacturing**
  - Respond to unforeseen changes quickly with reliable, up-to-date information

- **Configit Ace® for Post Sales/Service Activities**
  - Faster and more efficient support, service and maintenance based on reliable information
Bringing Value
Configit Ace® for Engineering

Designers and developers of products, systems and services are challenged by the exponential growth in product variants and versions required to support customization and digitalization.

Configit Ace® provides a platform for managing the millions of product configurations across the portfolio lifecycle of product variants and versions.

Configit Ace® provides a vendor agnostic, scalable platform for product configuration information that can be synchronized with PLM, ALM and CAD systems. This enables greater collaboration between designers, hardware and software developers based on a reliable single-source-of-truth.

Configit Ace® platform APIs enable product configuration information to be easily shared with other departments in a reliable, error-free manner with customizable views to meet user needs.
Key Capability
System-Level Configuration

Modeling complex products is difficult, but modeling complex systems of complex products is even harder. With Configit Ace®, it is possible to conquer this complexity with system-level configuration.

Configit Ace® enables designers to define submodels that are themselves complex product models. This enables each component of a system to be modeled individually and re-used in the creation of complex systems.

When combined with Configit Ace® Design 2D and 3D visualization support, it is possible for designers to visualize and interact with complex system-of-systems designs using accurate, up-to-date product configuration information.
Bringing Value
Configit Ace® for Sales

For sales, it is important to offer fast, reliable and accurate quotes for products and solutions while knowing that what is being offered to the customer is something that can be delivered and manufactured. This becomes even more important when products, systems or services offer multiple customization options.

Configit Ace® synchronization with sales tools and applications, ensures that there is zero risk of invalid product configuration information being presented to customers.

The availability of an independent, scalable source of product configuration information enables CRM systems and sales tools like CPQ to provide up-to-date, reliable information without the need to scale.

The Configit Ace® Configure module APIs enable developers to create bespoke, interactive sales configurators and other applications for partners, dealers and end customers creating better, higher quality sales experiences.
Key Capability
Design Automation

Seeing is believing and with Configit Ace®, visualization of complex products and systems has become easier than ever.

Configit Ace® Design plug-ins enable users of CAD and 3D visualization solutions to leverage already available product models and configuration information in an automated fashion when designing new solutions. 2D and 3D visualizations can be created based on Configit Ace® product configuration information, while product model rules and calculations can be used to build interactive designs with immediate feedback on the validity of selections.

The same capabilities can be used by sales product configurator application designers to visualize choices in 3D allowing customers to see the effect.
Bringing Value
Configit Ace® for Manufacturing

Customization leads to more products and systems to manufacture and potentially larger inventories of components and parts to manage. The challenge is to ensure that each product configuration is manufactured according to specification when required in a cost-effective manner.

Configit Ace® synchronization with MES and ERP systems ensures that any changes to product models and product configurations are immediately updated in these systems. There is therefore no risk of manufacturing according to outdated information.

The Configit Ace® Solution Space provides an overview of all potential product configurations and their status. This can be analyzed to optimize the product portfolio and provide input on potential alternatives in the event of a supply-chain disruption.
Key Capability
Solution Space Analysis

Confitix Ace® provides a repository of all portfolio product models and configurations across the lifetimes of multiple product versions and variants. This data can be analyzed to better understand all product configurations possible, configurations that can be manufactured and configurations that have been sold.

The availability of a specific product configuration is restricted using modeling rules. This ensures that products are not over-engineered where non-relevant or even non-profitable options are not offered to customers. By analyzing the Solution Space, it is possible to gain insight into the market appeal of different product configurations. This insight can be used to optimize product portfolios.

The Solution Space can also provide insight into alternative product configurations should a component or part no longer be available. This can be useful for manufacturing in addressing supply chain issues and for product configurator applications when an option is no longer available for customers to choose.
Bringing Value
Configit Ace® for Post-Sales/Service Activities

The majority of a product's lifetime is after sales and delivery. Making sure that products and systems can still be serviced, upgraded and repaired many years after launch is therefore important.

Configit Ace® is designed to support the entire lifecycle of a given product configuration. It provides a repository of all product versions and variants in the portfolio covering the past, present and future. This ensures that service and maintenance personnel have access to accurate information on the specific product configuration they are addressing.

As more products are moving to the cloud and/or offered as services, it is more important than ever for manufacturers to ensure that post-sales and service activities are efficient and cost-effective with reliable information available to service and maintenance personnel.
Key Capability
Resolving Invalid Configurations

One of the challenges of servicing products that have been deployed for some time is that their current configuration could be out-of-date. These products might not have been upgraded for some time. This means that when maintenance or repair needs to be performed on these products, it can be difficult to complete as required parts or software are no longer available.

Configit Ace® provides powerful analysis tools that can help maintenance technicians in these circumstances. When a product configuration is invalid, it is possible to get detailed information on the reasons why it is invalid along with explanations. This can help the maintenance technician to identify the features that are no longer valid, the rules that they are violating and why.

With this information, the maintenance technician can find alternatives that will result in a product configuration that is valid and result in a faster upgrade or repair of the product.
Discover the power of Configit Ace®
To learn more about Configit Ace® capabilities, see the following documents.

Configit Ace® API Product Sheet

Configit Ace® Product Sheet

Download

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