

SPK's Trace Report Engine for PTC Integrity™

SPK's Trace Report Engine radically improves Integrity's reporting capabilities

PTC's popular Application Lifecycle Management (ALM) product, PTC Integrity Lifecycle Manager™, has long been viewed as an industry leader. As with many such products, customers have asked for more powerful and flexible reporting capabilities. SPK now offers a new report engine for PTC Integrity users aimed specifically at compliance and traceability reporting, providing superior flexibility, control, and efficiency in the design and execution of trace reports.

Organizations that work in safety critical or highly regulated industries need to generate reports for auditors and other stakeholders that demonstrate their software development has followed the required processes, and the results meet the defined requirements. Such organizations often have very specific requirements about the content and layout of these reports, which requires more control than the built-in PTC Integrity reporting can provide. These reports need to be easily printed or delivered to external stakeholders, and thus MS Excel or PDF format is preferred over the HTML format that the PTC Integrity built-in reporting provides. The SPK Trace Report Engine addresses all these needs; it produces MS Excel output which can be easily exported to PDF, and has the following key capabilities:

More Precise Control over Traversing of Integrity Data Model:

The SPK Trace Report Engine takes a sequence of precise, controlled traversal definitions, with support for navigating arbitrary hierarchies of decomposition. It also has built-in detection and prevention of cyclic traversals, where "endless loop" following would occur. As a result, customers have more freedom to use relationships to link multiple artifact types,

and can distinguish artifacts by using any or all of the item's type, the item's category field value, or the relationship that links the item to its parent item in the traversal.

Support for Test Result Reporting:

Trace test results are a different type of object within Integrity Lifecycle Manager from items; the SPK Trace Report Engine is able to determine the complete set of test results associated with rest cases that have been traced to, and to support filtering those test results by a variety of criteria. Test results can be filtered by date range, by label applied to the test session item that manages the test results, by the state of the test session, and by type of verdict on the test result. The SPK Trace Report Engine incorporates the latest valid test result into the report for each test case, after applying the defined filter criteria.





Support for Categorize Trace Results by Containing Document:

The SPK Trace Report Engine provides unparalleled flexibility in terms of defining how to display the trace results; earlier versions of the SPK Trace Report Engine allowed categorization of the traced data in terms of item type, category field value, and what relationship was used to trace into the data. With the latest release of the SPK Trace Report Engine, users can additionally categorize the traced data in terms of the documents that contain the traced items. Each trace sheet of the report now has the option to display a "Document Information" row, which allows details for each containing document to be summarized.

More Flexible Report Layouts:

SPK's Report Engine uses the combination of Item Type, Item Category field value, and the relationship used to traverse into the artifact to define artifact types. The SPK Trace Report engine provides the user with full control over what artifacts are displayed, and in what order, across the report columns. Artifact types can encompass a range of Category field values.

Freedom to Use Any Trace Item as the Source of the Overview Data:

The SPK Trace Report Engine provides the option to produce an overview or summary sheet for a trace report. In prior releases, the data for the overview sheet came from the item or document that tracing started from. With the 2.7 release of the SPK Trace Report Engine, the user can specify any item that is part of the traced data as the source for overview data. The user can specify the overview source item through the graphical user interface immediately prior to generating the report.

Ability to Specify Text for Unused Cells:

Unused cells are those cells within a trace sheet of the report that do not contain data. In order to distinguish such cells from those that contain empty values, the SPK Trace Report Engine has provides the option to shade the unused cells using a user-defined color. With the 2.7 release, the SPK Trace Report Engine adds the option to display a user-defined text value within unused cells, such as "N/A" or "Not Used", to further assist in distinguishing between cells that contain traced data and those that do not.

Fully Supported, Tested and Documented Product:

The SPK Trace Report Engine supports all versions of PTC Integrity Lifecycle Manager from 10.0 onward, using only published, supported PTC API commands.