TecSurge Service

Transition from PDS to Smart 3D

Systems implementation and integration

Summary

Organisations making the transition from PDS to Smart 3D stand to gain from numerous productivity and other benefits, but must first address the challenge of preparing the Smart 3D environment with all the necessary reference data, configuration and content required to become productive.

In many cases, migrating production proven and time-tested existing reference data and other configuration from the PDS environment makes a lot of sense, and can help to ensure a smooth transition for both users, external stakeholders and even systems integrations. Unfortunately, there's a significant learning curve required to obtain the specialised knowledge necessary to perform such migration accurately and efficiently. In addition, given its typical one-off nature, it may not be cost-effective to develop and perform the migration in-house.

Differentiators

TecSurge offers a range of services designed to bridge this gap, helping organisations complete the transition to Smart 3D successfully, and begin realising the benefits from the new technology as quickly as possible.

Reference data

The first category of reference data that should be addressed includes specifications & catalogues, parametric symbols and hanger & support libraries. Once these elements are in place, you can begin to apply Smart 3D to your new projects, while the remaining configuration is performed in parallel.

- Specifications & catalogues – piping, structural and electrical commodity catalogues, dimensional data and specifications can be migrated directly from PDS to Smart 3D, or optionally via Smart Reference Data. Some customers may take the opportunity to rationalise or consolidate specifications at this point too, to optimise business processes in the new project environment.

- Symbols – custom or tailored EDEN symbols for all design applications must be re-created as .Net symbols for Smart 3D, using the existing PDS symbols as the baseline, and providing an excellent reference for testing and checking. Smart 3D functionality also provides new opportunities for enhancing symbols (such as connecting to, or reading data from other model elements) to improve designer productivity, or deliver additional project benefits, and such enhancements may be incorporated into the newly developed symbols.

- Hanger & Support libraries – similarly, Smart 3D hanger and support functionality is far more sophisticated than PDS, and existing libraries including catalogue data, parts and assemblies must be re-created specifically for Smart 3D. A thorough review of the new capabilities and alignment with the functionality provided by Smart 3D is recommended, to ensure the most productive end-user experience is delivered.

Deliverable configuration

Once specifications, catalogues, symbols and supports have been made available, end users may begin to use Smart 3D to prepare new designs and models in the platform. At some point, however, projects must be enabled to produce deliverables such as drawings and reports.

- Piping isometric drawings – while both PDS and Smart 3D use ISOGEN as the underlying piping isometric drawing generation engine, the configuration varies significantly between the platforms. Existing PDS ISOGEN configuration must be reviewed and equivalent configuration generated for Smart 3D, while also highlighting and collaboratively reviewing the new functionality available.

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- Drawing styles, rules & templates – as in many other areas, Smart 3D includes new and powerful technology helping to more fully automate the generation of orthographic drawings. Existing drawings generated from PDS are typically the most useful input for this activity, and in many cases manual annotation placed by PDS users can be replaced with automated drawing styles and rules in Smart 3D, improving productivity and quality.

- Reports – reports are typically either intended for human consumption, or used for systems integration by delivering a text file that can be imported into an external system. Both types of reports may be configured in Smart 3D, using the existing PDS report configuration as a starting point and interface specification to streamline integration.

Legacy data migration

With a fully configured Smart 3D environment comes the ability to execute projects to completion, and for many organisations, this is the point at which the existing PDS environment can be archived and fully retired. In some cases, however, existing PDS model and drawing data may be valuable, and retaining access to this data for reuse or modification in future is desirable.

- Plant Model Migration – migrating models and drawings from PDS to Smart 3D is highly technical task, and requires significant manual effort to augment the results of the automated tools available. Experience, automation and skilled resources are the three major ingredients needed to complete such migration successfully.

Going operational

With the Smart 3D environment populated with reference data, deliverable configuration, and legacy data migrated, organisations are equipped for full operational use. TecSurge offers managed services to support this operational environment, providing assistance with the day-to-day tasks such as supporting users, performing system administration, and monitoring and managing the system for peak efficiency.

- OnDemand – user support and system administration for engineering software

If this transition scenario describes your situation, contact us today for a quotation.

Contact us

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