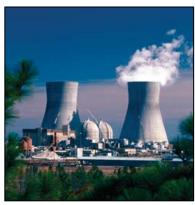
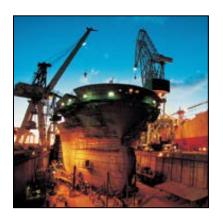
Process, Power and Marine Division SmartPlant 3D Implementation

Management Overview Training











Hardware Requirements

Medium Projects

- 16 to 50 effective users on one server
- Model database 8 15 GB
- Databases and catalog file server
- Separate interference checking (IFC) server (server or workstation)
- Separate drawing batch server (server or workstation)
- Name generator server and licensing server (server or workstation)
- Modeling (detail design) and administrator workstations can be on separate workstations or on the same workstation
- Use a separate distribution server for Global Workshare Configuration



Server Requirements

- 3 GHz Pentium 4 or multi-core processor (64-bit for medium and large projects)
- 4 GB to 32 GB RAM depending on project size (16 GB or more preferred)
- Digital tape or DVD backup system for server
- 100 BaseT or higher network interface (1 GB preferred)



Workstation Requirements

- 3 GHz Pentium 4 processor or Core 2 Duo
- 2 GB RAM (4 GB and a 64 bit OS for large drawing and SPR sessions updates)
- Graphics card with 32 bit Z-buffer



Training Administrators

- CAD Administrators
 - TSMP3001 SmartPlant 3D Administration
 - TSMP3005/3007 SmartPlant 3D Global Workshare
- Catalog Administrators (by discipline)
 - TSMP3002 SmartPlant 3D Equipment and Piping Reference Data
 - TSMP3003 SmartPlant 3D Electrical Reference Data
 - TSMP3004 SmartPlant 3D Structural Reference Data
- Drawings and Report Administrators
 - TSMP2001 SmartPlant 3D Drawings
 - TSMP2002 SmartPlant 3D Isometric Drawings
 - TSMPXXXX SmartPlant 3D Reports Workshop



Training Designers

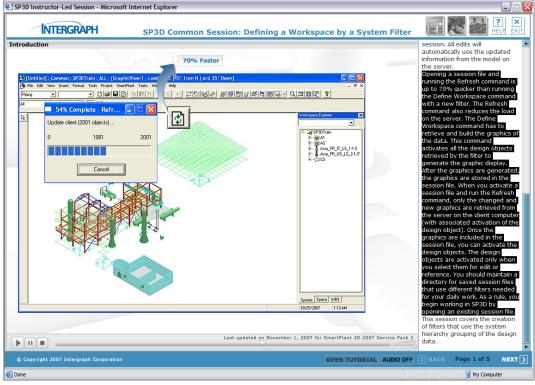
- TSMP1001 SmartPlant 3D Piping and Equipment Modeling
- TSMP1002 SmartPlant 3D Electrical Modeling
- TSMP1003 SmartPlant 3D Structure Modeling
- TSMPXXXX SmartPlant 3D Drawings for Designers



Training Customization/Automation

- TSMP4001 SmartPlant 3D Programming I
- TSMP4002 SmartPlant 3D Programming II
- TSMPXXXX SmartPlant 3D Data Model
- TSMPXXXX SmartPlant 3D Support Workshop

SmartPlant Virtual Training





Learning Management System



Virtual Instructor Led
Training



- SmartPlant 3D End User Training (available now)
- Hosted on a commercial LMS system by ElementK
- Provides access for up to 86 virtual sessions organized in courses for 1 year.
- Ability to track progress
- Ability to download tutorials and practice labs
- 24x7 support with web site and forum for technical help



Administrative Interface for Enterprise Customers

Benefits of SmartPlant Virtual Training



- Quality and Consistency
 - Exact same presentation regardless of time or locations. Removes the variations introduced by individual instructors.
 - Prepared by best experts for given topic from the product centers.
 - Reviewed by customers and software designers.
 - Educationally sound materials, consistent terms across all topics, objectives, prerequisites and summary screens for every topic.

Schedule Compression

- Users from multiple disciplines can learn simultaneously resulting in shorter startup time for projects starting with team new to SmartPlant 3D. Typical reduction from 3 weeks to 1 week.
- Ability to train new members of the team earlier rather than waiting for class with minimum enrollment requirements.

Cost Effective

- List price of US \$1200 per student is ½ of class room enrollment at US \$2500
- Further savings based on quantity in addition to travel costs.

Deployment



- Individual Students
 - Contact Intergraph Sales Representative or Local Intergraph Office
 - Standard Part Numbers for Discipline focused training

| Course Number | Title | Online Virtual Training Modules |
|------------------|-----------------------------------|---|
| SKVT127AE | SmartPlant 3D Piping Modeling | Piping modeling topics include equipment modeling, pipe routing, and isometric creation |
| SKVT128AE | SmartPlant 3D Electrical Modeling | Electrical modeling topics include cable tray routing, cable routing, and equipment placement |
| SKVT129AE | SmartPlant 3D Structure Modeling | Structural modeling topics |
| SKVT130AE | SmartPlant 3D HVAC Modeling | HVAC modeling topics include duct routing and equipment placement |

- Small Teams (less than 150 users)
 - Ask about quantity discounts
 - Intergraph manages user creation/course assignment process.
- Enterprise Customers
 - Access to User Management and Reporting Tools
 - Customized Courses / Branded Web Site
 - Additional Content such as company specific workflow training can be developed and integrated.



Frequently Asked Questions

- Does SPVT replaces traditional class room training?
 - Traditional class room training best suited for CAE teams and Discipline Application Specialists (Super Users / Early implementation teams). SPVT best suited for Roll-out scenarios, small & remotes teams of 3-5 users, or new additions to the teams.
- Does SPVT requires 3D software License?
 - SP3D / SM3D license is not required to purchase SPVT, however training experience is not complete
 without hand-on experience. Practice Labs provided with SPVT match up with training plant backup
 available on Siebel web site.
 - Intergraph is exploring alternatives for making training environment available via web based virtual lab setup and/or providing increased access to regional training facilities at Intergraph Offices.
- What is plan to update the training to match new software versions?
 - Intergraph plans to update training for every major version release. Scope of change depends on number
 of enhancements in new version. Our goal is to make training available as soon as new versions are
 released. Most likely users will get option to access version specific training sessions.
- Is there a certification/evaluation program to access skills after the training?
 - Currently one question quiz is added to each session as trial basis, however answers are not tracked.
 Completion and time spent on each session is tracked. System is capable of handling certification requirements, so we may be able to implement it in future.