

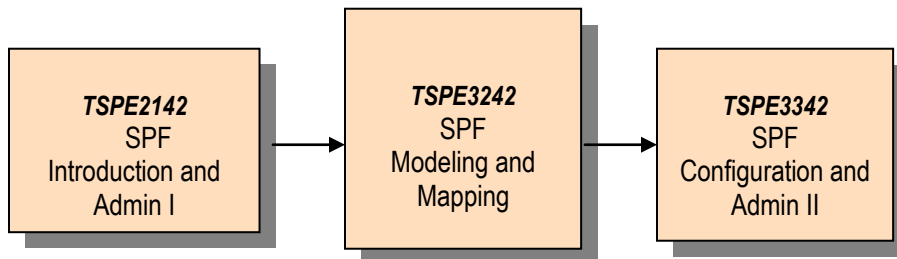


Curriculum Path & Training Guidelines

Intergraph recommends that SmartPlant Foundation (SPF) users select one of the following training tracks described below.

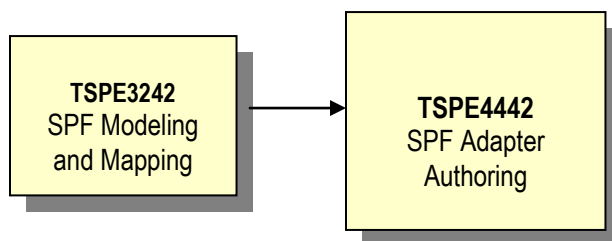
1. SPF Administrator

For those interested in SPF setup and configuration.



2. Developer in Adapter Writing

For those developing a SPF Adapter.





Training Course Highlights

Course Number	Title	No of Days	Per Enrollment (US \$)	On-Site Excl. Travel (US \$)
TSPE2142	SmartPlant/SmartPlant Foundation Introduction and Administration I	4.5	2500	12500
TSPE3242	SmartPlant Foundation Modeling and Mapping	4.5	2500	12500
TSPE3342	SmartPlant Foundation Configuration and Admin II	4.5	2500	12500
TSPE4442	SmartPlant Foundation Adapter Authoring	4.5	2500	12500



SmartPlant Foundation Introduction and Administration 1-TSPE2142

Length: 4.5 days

Price: \$2,500/Per enrollment – \$12,500 private/on-site (plus expenses)

Pre-requisites:

Familiarity with Microsoft Windows NT 2000, XP or Windows Server 2003

Knowledge of database administration (i.e. Oracle, Microsoft SQL Server)

This introductory administration course for SmartPlant and SmartPlant Foundation (SPF) is the first in a series of Process, Plant and Marine classes introducing an administrator to the concepts and functionality available in the SPF product. This course provides an overview of the concepts and architecture of SmartPlant and SPF. The class includes a tour of the Desktop Client as well as basic end user functionality, such as creating new objects, searching and navigation, concurrent engineering and other object manipulations. The class covers the basics of System Administration, including the security model, configuring file storage (vaults), SPF Progress, and token license setup and configuration. The course includes a brief demonstration of SmartPlant publish and retrieve functionality using SPF Authoring. Also included is a detailed look at the ability to create a new Plant Breakdown Structure and registration of authoring tools, such as SmartPlant P&ID and SmartPlant Instrumentation. The class is presented as a combination of lecture sessions followed by hands-on activity periods.

SPF Curriculum Path & Training Guidelines

Major Topics

- Concepts, Terminology and Architecture
- Components and structure
- SPF Database
- Publish, Retrieve, Register
- Environment Scope and User preferences
- Overview of the Desktop Client
- Create document, Attach file
- Searching and FTR search
- Navigation
- Create Ad Hoc Reports
- File Viewing and Mark-Up
- Object Check in/out
- Reference Files
- Subscribe, Sign-off, and Revise
- Concurrent Engineering
- Basic System Administration
- Security Model
- Plants and Projects
- Hosts and Vaults
- File types
- Printers/print servers
- Token license management
- Web Portal
- Progress
- SmartPlant Foundation Installation and Configuration
- SPF Authoring
- Creating and Publishing a Plant Breakdown Structure (PBS)



SmartPlant Foundation Modeling and Mapping – TSPE3242

Length: 4.5 days

Price: \$2,500/Per enrollment – \$12,500 private/on-site (plus expenses)

Pre-requisites: SmartPlant Foundation 4.2 Introduction and Administration 1 – TSPE2142

The SmartPlant Modeling and Mapping course is the second in the Process, Plant and Marine series of classes on SPF and is designed to introduce an administrator and a data modeler to the SmartPlant 2008 data dictionary and structure. This course, which is a pre-requisite for the SmartPlant Adapter Authoring class, provides an introduction and understanding of meta-schema and schema concepts, an overview of the SmartPlant Schema definition, and a working knowledge of the Schema Editor. SmartPlant Modeling and Mapping will also provide an understanding of mapping concepts and how to use the Schema Editor to configure mapping between the SmartPlant Schema and the authoring tool meta schema files. The course also illustrates the steps necessary to extend authoring tool data models to move customer properties from one authoring tool to another through SPF. The course also illustrates the steps necessary to extend authoring tool data models to move customer properties from one authoring tool to another through SPF. The steps to load the modified schema into the SPF database is also covered. The class is presented as a combination of lecture sessions followed by hands-on activity periods.

Major Topics

- Review of the SmartPlant Architecture
- Introduction to the Schema Editor
- Schema Overview and Modeling
- Viewing and finding publish data
- Authoring tool modeling steps
- Mapping between SmartPlant and SmartPlant P&ID
- Mapping between SmartPlant and SmartPlant Instrumentation
- Mapping between SmartPlant and SmartPlant Electrical
- Mapping between SmartPlant and SmartPlant 3D
- Loading Schema Changes and Testing



SmartPlant Foundation Configuration & Administration II–TSPE3342

Length: 4.5 days

Price: \$2,500/Per enrollment – \$12,500 private/on-site (plus expenses)

Pre-requisites:

SmartPlant Foundation 4.2 Introduction and Administration 1 – TSPE2142

SmartPlant Foundation 4.2 Modeling and Mapping – TSPE3242

The SmartPlant Foundation Configuration and Administration II course is the next in a continuing series of Process, Plant and Marine classes that is designed to introduce an administrator and/or data modeler to the concepts and functionality available in the SPF product. This course builds on the concepts and functionality that was introduced in the SmartPlant Foundation Introduction and Administration I and the SmartPlant Modeling and Mapping courses. The class begins with an overview of the SmartPlant model and continues with an introduction to the Administration GUI interface. This course also focuses on configuring classified objects, generating and modifying data forms, and configuring methods, menus and toolbars. The SmartPlant Foundation Loader and the Schema Import Wizard is also discussed. Another major topic is the Workflow module which allows an administrator to configure custom workflows. Also discussed is the ability to create and use Transmittals as well as configuring Adhoc Reports. The class is presented as a combination of lecture sessions followed by hands-on activity periods.

Major Topics

- Review of the SmartPlant Model
- Generating and customizing forms
- SPF Loader
- Configuring methods
- Configuring Classified Objects
- Configuring the ENS
- Creating and testing workflows
- Transmittals, configuration and usage
- Configuring ad hoc reports and and line list reports
- Vault Replication
- Using the Excel Import Wizard
- Datasheets in SPF
- Hotspotting



SmartPlant Foundation Adapter Authoring– TSPE4442

Length: 4.5 days

Price: \$2,500/Per enrollment – \$12,500 private/on-site (plus expenses)

Pre-requisites:

SmartPlant Foundation 4.2 Modeling and Mapping – TSPE3242

.NET programming experience

SmartPlant Foundation Adapter Authoring includes designing and building an adapter to integrate SmartPlant Foundation with a 3rd party application. The class is presented as a combination of lecture sessions followed by hands-on activity periods.

Major Topics

- Schema Component Programming
- Adapter Authoring Engineering Framework Common User Interface
- Adapter Authoring Engineering Framework Adapter User Interface
- Programming a Sample Adapter