Shut downs, Turn Arounds, and Outages (STO) are scheduled events necessary to re-establish Asset and Process Integrity in asset intensive industries such as petrochemicals, refining, utilities and offshore oil & gas platforms. STO projects are complex, risky and expensive to navigate. STO projects are dynamic, ever-changing hour-by-hour, creating havoc at each level of the STO organization as they struggle to figure out where they are, and where they’re going.

Primavera P6 is popular project management software used in shutdown, turnaround and operational projects to successfully plan & schedule projects. IPEC Project Systems Sdn Bhd in exclusive partnership with STO Navigator Canada is introducing Primavera P6 STO Training Course in Malaysia and Asia. This course combine best practises for planning & scheduling for STO project’s and hand’s on training of Primavera P6 simulating a sample STO project.

The main objective of this course is to teach STO Methodology—using Primavera P6 to better understand the dynamics of Project Controls; to drive a project, versus simply monitoring its progress; or lack of progress, as is often the case.

Who should attend?

- Planners
- Schedulers
- Project Control Professional
- Maintenance Managers
- Operations Manager
- Plant Manager’s
- Turnaround/Shutdown Manager
- Shutdown contractor’s

This course is recommended for professionals who are involved in shutdown, turnaround and maintenance in petrochemicals, refining, utilities, offshore O&G platforms /structures and large manufacturing plant’s.
Primavera™ P6 for STO Planning & Scheduling – STO300 Course Overview

Traditional scheduling methods used in EPC Project Management are not sufficient for controlling the dynamics of STO Project Execution...” —Ej Lister

On-time, On-Budget simply isn’t good enough to claim success on a STO project; it’s imperative that effective STO Project Controls are implemented as the Navigator of the STO Methodology Management Process to meet its true objectives...” —Ej Lister

- Plan
- Estimate
- Program
- Schedule
- Execute
- Update
- Performance
- Safety
- Quality
- Wrench-time

Primavera for STO Planning & Scheduling – STO300 Course Overview
## Course Agenda

### Day 1 – Theme: Planning and Estimating

The theme for this session is Planning and Estimating, where the student will learn the rules of creating a plan and estimating its resource requirements. The student will learn to use the Field Planning Form prior to creating a layout in Primavera™ P6 and entering the plan within a specific Work Breakdown Structure bucket.

At the end of Day 1 the student will have a STO Project in Primavera™ P6 with several Worklist / Work Order Plans assigned to their appropriate WBS bucket, ready for the next session (Day 2) to begin Programming and Scheduling.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00am</td>
<td>- Introductions and Course Overview</td>
</tr>
<tr>
<td>8:30am</td>
<td>- Presentation – STO Project Methodology and Technology</td>
</tr>
<tr>
<td>9:00am</td>
<td>- Presentation – Planning, Scheduling and Field Execution Roles</td>
</tr>
<tr>
<td>10:00am</td>
<td>- Coffee Break</td>
</tr>
<tr>
<td>10:15am</td>
<td>- Presentation – Planning and Estimating Best-Practices</td>
</tr>
<tr>
<td>10:45pm</td>
<td>- Exercise – Planning and Estimating Best-Practices</td>
</tr>
<tr>
<td>12:00pm</td>
<td>- Lunch</td>
</tr>
<tr>
<td>1:00pm</td>
<td>- Presentation - Work Breakdown Structure</td>
</tr>
<tr>
<td>1:30pm</td>
<td>- Exercise – Primavera™ P6 Lesson 1 – Create a STO Project</td>
</tr>
<tr>
<td>2:45pm</td>
<td>- Coffee Break</td>
</tr>
<tr>
<td>3:00pm</td>
<td>- Exercise – Primavera™ P6 Lesson 2 – Creating Activity Plans</td>
</tr>
<tr>
<td>4:30pm</td>
<td>- Exercise – Primavera™ P6 Lesson 3 – Creating Resources</td>
</tr>
</tbody>
</table>
Day 2 – Theme: Programming and Scheduling

The theme for this session is Programming and Scheduling, where the student will learn the difference between them, and learn to create programming codes and how to assign them, both manually and globally. The student will learn the various methods of scheduling; how to apply them, and when to use them. The highlight of this session will be Dynamic Schedule Management (DSM) for driving, not monitoring their STO project.

At the end of Day 2 the student will have a STO Project in Primavera™ P6 that represents a Plan, in preparation for the next session of Execution Management and Control.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00am</td>
<td>Presentation – Dynamic Schedule Management</td>
<td>Programming, Phasing the STO project, Scheduling Methodology</td>
</tr>
<tr>
<td>9:00am</td>
<td>Exercise – Primavera™ P6 Lesson 4 – Coding the STO Project</td>
<td>Cost Management, Creating Phase Calendars, Creating Activity Codes, Creating User-Defined Fields</td>
</tr>
<tr>
<td>10:00am</td>
<td>Coffee Break</td>
<td></td>
</tr>
<tr>
<td>10:15am</td>
<td>Exercise – Primavera™ P6 Lesson 5 – Programming the STO Project</td>
<td>Assigning Calendars, Assigning Activity Codes, Global Change / Fill Down, Applying Productivity Factors</td>
</tr>
<tr>
<td>12:00pm</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>1:00pm</td>
<td>Presentation – Execution Strategy</td>
<td>Shutdown / Start-up, Inspection/Maintenance/Projects</td>
</tr>
<tr>
<td>2:00pm</td>
<td>Exercise – The Execution Strategy</td>
<td></td>
</tr>
<tr>
<td>2:45pm</td>
<td>Coffee Break</td>
<td></td>
</tr>
<tr>
<td>3:00pm</td>
<td>Exercise – Primavera™ P6 Lesson 6 – Scheduling</td>
<td>Scheduling, Levelling (Optimizing the Plan)</td>
</tr>
<tr>
<td>4:00pm</td>
<td>Exercise Primavera™ P6 Lesson 7 – Managing Data</td>
<td>Maintaining the Project Documents Library, Grouping and Sorting, Applying Filters, Saving a Baseline</td>
</tr>
</tbody>
</table>
Day 3 – Theme: Execution Management and Control

The theme for this session is Execution Management and Control, where the student will learn how to create reports for distribution (Daily Shift Reports) and analysis (Key Performance Reports) using the Primavera™ P6 Report Writer with Filters and Batch Printing. The student will create a new Layout for Updating while establishing the methodology for obtaining accurate and timely Field Updates.

The student will learn to update and using DSM (Dynamic Schedule Management) learn to produce a new Daily Shift Report (Plan) to accommodate the Field Execution Coordinators based on resource and asset availability.

At the end of this session the student will have a complete understanding of Planning, Estimating, Programming, Scheduling, Updating and reporting to ensure an effective and efficient STO project with a combined effort of Planners, Schedulers and Field Execution Coordinators.

8:00am - 9:00am - Presentation – Execution Management and Control
  - Daily Shift Report Distribution
  - Field Execution Update Methodology
  - Performance Reporting (KPI’s)

9:00am - 10:00am - Exercise – Primavera™ P6 Lesson 8 – Creating Reports
  - Creating Report Groups
  - Creating Reports

10:00am - 10:15am - Coffee Break

10:15am - 12:00pm - Exercise – Primavera™ P6 Lesson 9 – Updating and Progressing
  - Create an Update / Status Layout
  - Updating and Progressing
  - Establish a New Plan (DSM)

12:00pm - 1:00pm - Lunch

1:00pm - 2:00pm - Exercise – Primavera™ P6 Lesson 10 – Performance Management
  - Performance Management
  - Project Website

2:00pm - 2:45pm - Exercise – Primavera™ P6 Lesson 11 – Project Website
  - Project Website

2:45pm - 3:00pm - Coffee Break

3:00pm - 4:00pm - Presentation – Milestone Schedule
  - Lessons-Learned

4:00pm - 4:30pm - Review – Questions – Certificates and Photos
  - Course Evaluation Forms
Course Overview

This 3 day intensive training course is designed by STOnavigator™ Masters® & licensed to IPEC Project Systems Sdn Bhd for the individuals responsible for the planning, scheduling, execution management and control functions associated with shutdowns, turnarounds, outages and operational maintenance projects.

To maximize the effectiveness of Primavera P6™ for managing these projects we’ve designed a course that not only focuses on the ability to use the software effectively, it focuses also on providing best-practice management tools for effective estimating, schedule development and field execution to ensure your overall project meets your key performance targets associated with safety, cost, duration, worker efficiency and quality.

Attendees will learn how to properly develop a plan based on realistic estimates, how to apply productivity factors and measure performance, how to develop and manage a dynamic schedule using the Primavera P6™ levelling capabilities and how to get buy-in from field execution and operations coordinators during the outage.

**Objective**

The objective of this course is to provide instruction on navigating and managing data in the Primavera P6™ environment while teaching industry best-practices for planning, scheduling and executing an efficient shutdown, turnaround, and outage or capital project.

**Vision**

The Planning Team will assist with establishing the Key Performance Targets and control the project to meet or exceed them.

<table>
<thead>
<tr>
<th>Key Performance Indicators</th>
<th>Key Performance Targets</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget / Workscope</td>
<td>Based on Risk/Cost Benefit</td>
<td>Strategic Planning</td>
</tr>
<tr>
<td>Duration</td>
<td>Based on Shutdown/Start-up and Longest-path</td>
<td>Planning and Scheduling</td>
</tr>
<tr>
<td>Safety / Environment</td>
<td>Zero Incidents</td>
<td>Execution</td>
</tr>
<tr>
<td>Quality</td>
<td>Zero rework, zero leaks</td>
<td>Execution</td>
</tr>
<tr>
<td>Direct Wrench-time</td>
<td>55%</td>
<td>Execution</td>
</tr>
</tbody>
</table>
Flow of Lessons

The steps (lessons) outlined below have been purposefully sequenced in the progression in which a real-life STO project should be planned, scheduled and controlled:

- STO Project Methodology and Technology
- Planning, Scheduling and Field Execution Roles
- Creating a STO Project and Setting Defaults
- Creating Layouts (saving, importing, exporting, controlling)
- Creating the Work Breakdown Structure
- Worklist Management and Control
- Creating a Planned Job Package
- Work Order (Task) Activity Sequence - Field Planning and Estimating
- Entering Activities and Relationships Data
- Using Steps
- Defining Resources
- Creating Resources and Limits
- Creating Phase Calendars
- Creating Activity Codes
- Managing Data (Grouping, Sorting, Filtering, Global Changes)
- Establish Key Performance Indicators (KPI's)
- Applying Productivity Factors
- Defining the Execution Plan
- Prioritizing Work
- Dynamic Schedule Management (DSM)
- What-if Scenarios – Optimizing the Plan
- Saving a Baseline
- Creating Shift Reports
- Execution Management
- Updating Activities
- Creating Performance Reports
- Using Earned-Value Analysis
Course Instructor & Leader

Ej (Ted) Lister is an internationally recognized innovative leader and sought-after Shutdown, Turnaround and Outage Navigator and Keynote Speaker and Presenter; author of several books and manuals relevant to STO Best-Practices. Gifted, patient and enthusiastic communicator and people-person; projects are not successful, the project team is.

25 years of combined experience in the field and in the war-room. Certified Red Seal Electrician and Instrumentation Technologist. Qualified Planner/Scheduler and Project Controls Specialist with HR and Change Management accreditations. Ej is the Editor of STO Navigator™ learning blog, contributing weekly to share knowledge and experience to more than 10,000 visitors monthly. In 2005 Ej published Successful Change Management and is currently completing a High Performance Organization book Lead, Manage or Dig.

Favorite Quote: “Grown-ups invented work to keep playing together…”

Primavera for STO Planning & Scheduling – STO300 Course Overview
IPEC Project Systems Sdn Bhd focuses in providing solutions that help project-intensive businesses to successfully manage their project, programmes and portfolios. Our core business is Oracle Primavera project portfolio solutions but we also provide customized project management solutions, project accelerators and integration to various enterprise systems. IPEC have recently concluded a joint venture with STO Navigator Inc to be exclusive partner in South East Asia for STO Navigator consulting, training & products.

IPEC Project Systems provides Primavera software, consulting, implementation, training, integration and premier technical support for:

- Clients who are in the process of implementing Oracle Primavera solution for the first time
- Clients are thinking about migrating to a newer version of Oracle Primavera solution
- Clients who are considering an upgrade to their existing Oracle Primavera solution
- Clients want to make the best use of their existing Oracle Primavera solution deployed

We look forward working with you as strategic solution provider. IPEC does more than selling software. Our specialty is aligning business and technology to deliver solutions that bring value across entire organization. We work with you to fully understand your business challenges and focus on strengthening your organization by focusing on your immediate needs first. We are proactive in our approach to assist our customers which enables them to improve delivery of their projects and programmes.

IPEC Project Systems Sdn Bhd - 1014705-T

Suite 208, Block A, Phileo Damansara 1,
Jalan 16/11, Off Jalan Damansara, Petaling Jaya,
Selangor, 46350, Malaysia.
Email: sales@ipecsystems.com.my
Phone: +603-74935098
Fax: +603-74935100
Website: www.ipecsystems.com.my