

Using STAGE Course Syllabus

Session duration: Classroom 4 days

Main Objective

In this course, you will learn how to effectively use STAGE and receive a global overview of its capabilities and data structures.

Upon completion of the course, the participant will be able to define profiles, scripts and missions, and create entities in scenarios. You will also be able to control the simulation of the scenarios and learn how to use the STAGE VP Viewer.

Target Audience

This is an ideal course for users and developers with basic PC knowledge that want to learn how to use STAGE.

Prerequisites

This course assumes basic PC knowledge.

Format

This Instructor-led course is taught through a series of lectures and hands-on exercises in which you learn how to use all of the components of the tool.

Topics Covered

- Basic concepts
- Scenarios
- Profiles
- Missions
- Ground Navigation
- Scripts
- Scenario Manager utilities
- STAGE VP Viewer
- Terrain
- Communicating within STAGE
- Communicating with DIS
- Communicating with HLA

Daily Outline for Classroom “Using STAGE” Course

Day 1

- Lesson 1: Basic concepts
- Lesson 2: Scenarios
- Lesson 3: Profiles

Day 2

- Lesson 4: Missions
- Lesson 5: Ground Navigation

Day 3

- Lesson 6: Scripts
- Lesson 7: Scenario Manager utilities
- Lesson 8: STAGE VP Viewer
- Lesson 9: Terrain

Day 4

- Lesson 10: Communicating within STAGE
- Lesson 11: Communicating with DIS
- Lesson 12: Communicating with HLA
- Recap of the 12 lessons
- Questions and Answers specific from trainees
- Closing the course

Detailed Description

Lesson 1: Basic concepts

- Useful terms
- System architecture
- Environment variables
- Ensuring STAGE is installed
- EXERCISE 1-1: Running STAGE (standard installation)
- EXERCISE 1-2: Running STAGE (course package)
- Changing the directory structure
- Command line options
- Licensing

Lesson 2: Scenarios

- Building a scenario
- EXERCISE 2-1: Building a scenario
- Managing the Tactical Display
- Running a scenario
- EXERCISE 2-2: Running a scenario
- Modifying a scenario
- EXERCISE 2-3: Modifying a scenario
- Copying scenario data between scenarios
- Copying a scenario to another database
- Controlling and monitoring a scenario at runtime
- EXERCISE 2-4: Modifying the speed factor
- Taking snapshots and restoring the simulation
- EXERCISE 2-5: Taking snapshots and restoring the simulation
- Recording the simulation with the Logger
- EXERCISE 2-6: Recording a simulation with the Logger

Lesson 3: Profiles

- Creating a new tactical database
- EXERCISE 3-1: Creating a new tactical database
- Creating profiles
- Articulated Part profile
- EXERCISE 3-2: Creating an Articulated Part profile
- Sensor profile
- Working with the Curve Editor
- EXERCISE 3-3: Creating two Sensor profiles
- Weapon profile
- EXERCISE 3-4: Creating three Weapon profiles
- Radio profile
- EXERCISE 3-5: Creating a Radio profile
- Formation profile
- EXERCISE 3-6: Creating a Formation profile
- Platform profile
- EXERCISE 3-7: Creating five Platform profiles
- Copying profile data between databases
- EXERCISE 3-8: Copying data from one database to another
- Creating scenario-related profiles
- EXERCISE 3-9: Creating an Atmospheric profile
- Special Zone profiles
- EXERCISE 3-10: Creating a Special Zone in the scenario
- Detailed Building profiles

Lesson 4: Missions

- Assigning a mission to an entity
- Creating a mission
- Executing actions
- EXERCISE 4-1: Setting the fighter's initial parameters
- Creating a conditional task group
- EXERCISE 4-2: Checking the fighter's altitude
- EXERCISE 4-3: Avoiding a tank
- Creating an event task group
- EXERCISE 4-4: Resuming the fighter's trajectory
- EXERCISE 4-5: Rechecking the fighter's altitude
- EXERCISE 4-6: Heading towards the fighter's enemy
- Creating a sub-mission
- EXERCISE 4-7: Attacking the fighter's enemy
- Controlling missions at runtime
- Viewing the mission history
- EXERCISE 4-7b: Viewing the mission history
- EXERCISE 4-8: Coordinating an attack
- EXERCISE 4-9: Coordinating an attack Part 2
- EXERCISE 4-10: Coordinating an attack Part 3

Lesson 5: Ground Navigation

- Controlling an entity with Ground Navigation
- EXERCISE 5-1: Generating a Ground Context
- EXERCISE 5-2: Road Following by mission
- EXERCISE 5-3: Road Following by trajectory
- EXERCISE 5-4: Wandering on road
- EXERCISE 5-5: Obstacle Avoidance by mission
- EXERCISE 5-6: Obstacle Avoidance by trajectory
- EXERCISE 5-7: Obstacle Avoidance and Road Following
- EXERCISE 5-8: Entering a building

Lesson 6: Scripts

- You should use Missions instead of Scripts
- Assigning a script to an entity

- EXERCISE 6-1: Assigning a script
- Building a script
- EXERCISE 6-2: Using an entity object
- EXERCISE 6-3: Using a systems object
- EXERCISE 6-4: Using a track object
- EXERCISE 6-5: Using a script object
- EXERCISE 6-6: Using a data_link object
- EXERCISE 6-7: Using a unit object

Lesson 7: Scenario Manager utilities

- Using the Configuration Manager
- EXERCISE 7-1: Accessing the documentation
- Units
- EXERCISE 7-2: Modifying units
- Changing the interface language
- EXERCISE 7-3: Changing the Database Editor menu language

Lesson 8: STAGE VP Viewer

- Controlling the VP Viewer
- EXERCISE 8-1: Launching the STAGE VP Viewer
- Configuring the VP Viewer
- EXERCISE 8-2: Changing the 3D model

Lesson 9: Terrain

- Terrain mode
- CDB mode
- OpenFlight mode
- Legacy mode
- EXERCISE 9-1: Changing the terrain mode
- EXERCISE 9-2: Selecting a CDB database

Lesson 10: Communicating within STAGE

- EXERCISE 10-1: Simulating and displaying on two different computers
- Displaying on multiple computers
- EXERCISE 10-2: Using multiple SMs
- EXERCISE 10-3: Using multiple SMs, one CDB

Lesson 11: Communicating with DIS

- DIS definition
- Assigning a DIS type enumeration
- EXERCISE 11-1: Joining an exercise from different computers

Lesson 12: Communicating with HLA

- HLA definition and terminology
- EXERCISE 12-1: Joining a Federation HLA-HLA