

# Data modeling on Atrium

## Course Description

### *Audience*

This course addresses developers who want to learn how to extend the data model in Atrium and use the data in applications

### *Prerequisites*

The courses “System Overview for Atrium”, “Python”.  
Basic Unix knowledge

### *Duration*

2 days

### *Course goals*

You will learn how to program in Python using the data model through ARA, and how to extend the data model in client configuration. You will also learn how to bridge over to Rave and back, and look at how data is stored in the UDM database model.

### *Course topics*

- The Atrium system model architecture ARM
- ARA:
  - Activity resource assignment model
  - Working with resources
  - Working with activities
  - Working with assignments
  - Attributes in ARA
  - Generic objects support
- UDM:
  - Overview of the Atrium data model
  - How to extend the data model in client configuration
  - How to make extensions available in ARA
  - Revisions in database
  - Versions in data
- Rave support
  - Evaluating Rave values on ARA objects
  - Getting back to Rave objects from ARA
- ARA business functions overview
  - Push/pop of assignments on crew members
  - Callout
  - Open time generator

The course is both presentations and exercises where you will practice important concepts in the course. Exercise are programmed in Python within an Atrium system.