

PEARC17 Building Science Gateways using Apache Airavata

Tutorial Agenda

Goals of the Tutorial

- Hands-on experiences in using and building gateways with Airavata.

Tutorial Notes - <https://s.apache.org/pearc17-airavata-notes>

Tutorial Modules

Module	Time	Title	Speaker	Notes
Module 1	9.00 am - 9.30 am	Welcome	Marlon Pierce	<ul style="list-style-type: none">• Presentation: Introduction - (5 min)<ul style="list-style-type: none">○ Introduce the team, the Gateway concept○ Introduction of the audience members○ Discuss User Stories• Slides
Module 2	9:30 am - 10.00 am	Gateway End User Hands-on Tutorial	Marcus Christie	<ul style="list-style-type: none">• Exercise: Create Accounts on Test-Drive Gateway - https://test-drive.airavata.org/• Exercise: Test-Drive End User demo<ul style="list-style-type: none">○ Execute your favorite available (pre-registered) application on XSEDE Resources, monitor progress, view outputs.○ Use provided sample input files, or try your own input configurations and data.○ Clone, Cancel an experiment.• Test-Drive Slides

Module 3	10.00 am - 10.30 am	Gateway Administrator Hands-on Tutorial	Sudhakar Pamidighantam, Suresh Marru	<ul style="list-style-type: none"> • Exercise: Gateway administrative dashboard <ul style="list-style-type: none"> ○ Manage users, administrators. ○ Manage gateway preferences. ○ Manage computational resource information. ○ Manage application descriptions ○ Monitor, Diagnose experiment status (e.g: failures) • Recap & Preview of Second Half
Conference Break - 10.30 am to 11.00 am				
Module 4	11.00 am to 11.15 am	Build your own Gateway	Marcus Christie	<ul style="list-style-type: none"> • Exercise: Requesting a new Gateway <ul style="list-style-type: none"> ○ Walkthrough of the request process ○ Gateway Choices for User Management • Presentation: Gateway Deployment Overview • Slides
Module 5	11.15 am to 11.40 am	Customize your Gateway	Eroma Abayasinghe	<ul style="list-style-type: none"> • Demo: Customizing a newly created gateway <ul style="list-style-type: none"> ○ Look and Feel to match institution or other branding ○ Managing Applications, registering new applications • Slides

Module 6	11.40 am to Noon	Advanced Capabilities	Suresh Marru	<ul style="list-style-type: none"> • Presentation & Discussion: <ul style="list-style-type: none"> ○ API Overview ○ Notebook Integration ○ Desktop Application Integration ○ Collaborations through Groups ○ Metadata Extraction & Search
Module 7	Noon to 12.30 pm	Attendee Next Steps & Getting support	Marlon Pierce	<ul style="list-style-type: none"> • Presentation & Discussion: <ul style="list-style-type: none"> ○ Airavata Feature Outlook ○ XSEDE ECSS Support <ul style="list-style-type: none"> ■ Assistance with gateway integration of XSEDE resources. ○ Science Gateway Community Institute <ul style="list-style-type: none"> ■ Support with campus integration, front-end design, incubation advice ○ Slides

- Target Attendees
- Campus Champions
- Gateway Developers
- XSEDE ECSS Staff
- Notable Links
- Airavata PGA Gateway: <https://testdrive.airavata.org/>
- Gateway User Manual: [PHP Reference Gateway for Airavata - End-User Guide](#)
- Gateway Admin Manual: [PHP Reference Gateway for Airavata - Gateway Admin Guide](#)
- Application Input Files: [PEARC17 Gateway Tutorial Application Input Files and Parameters](#)
- Official Airavata Website: <http://airavata.apache.org>

