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](https://s.apache.org/pearc17-airavata-notes)

Tutorial Modules

<table>
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<th>Module</th>
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| Module 1 | 9.00 am - 9.30 am | Welcome                                    | Marlon Pierce | ![Presentation: Introduction - (5 min)](https://s.apache.org/pearc17-airavata-notes)  
• 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 | ![Exercise: Create Accounts on Test-Drive Gateway - [https://test drive.airavata.org/](https://test drive.airavata.org/)](https://test drive.airavata.org/)  
• Exercise: Test-Drive End User demo  
• 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 | • **Exercise:** Gateway administrative dashboard  
• 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 |
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<tr>
<td><strong>Conference Break - 10.30 am to 11.00 am</strong></td>
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| Module 4 | 11.00 am to 11.15 am | Build your own Gateway | Marcus Christie | • **Exercise:** Requesting a new Gateway  
• 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 | • **Demo:** Customizing a newly created gateway  
• Look and Feel to match institution or other branding  
• Managing Applications, registering new applications  
• Slides |
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<tr>
<td>6</td>
<td>11.40 am to Noon</td>
<td>Advanced Capabilities</td>
<td>Suresh Marru</td>
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<td>7</td>
<td>Noon to 12.30 pm</td>
<td>Attendee Next Steps &amp; Getting support</td>
<td>Marlon Pierce</td>
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**Presentation & Discussion:**
- **Module 6**
  - API Overview
  - Notebook Integration
  - Desktop Application Integration
  - Collaborations through Groups
  - Metadata Extraction & Search

**Presentation & Discussion:**
- **Module 7**
  - Airavata Feature Outlook
  - XSEDE ECSS Support
    - Assistance with gateway integration of XSEDE resources.
    - Science Gateway Community Institute
      - 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/
- Application Input Files: PEARC17 Gateway Tutorial Application Input Files and Parameters
- Official Airavata Website: http://airavata.apache.org