

OIN Boulder Workshop Agenda (v12 – September 10th 2014)

Presenters: Liam Randall (Bro Project), Josh Frank (Arista Networks)

- **Optional Day 0 (Monday, Sept 15th) = Bro (contact Alex Hsia Alex.Hsia@noaa.gov to attend): 8:00 am to 4:00 pm**
 - **Breakfast 7:30-8:00**
 - **Part 1- Bro Overview 8:00 – 11:30**
 - Introduction to the basic concepts of underlying the Bro Platform and the Bro Programming Language
 - Basic GitHub Setup
 - Introduction to the various components- bro, bro-cut, configuration files
 - Training Virtual Machine Setup
 - Intel Framework
 - Files Framework
 - **Lunch 11:30 – 12:30**
 - **Part 2- Administration 12:30 – 3:00**
 - Update your Repo's
 - Protocol State Machine
 - Signature Framework
 - Basic Tool Integration
 - Basic Malware
 - Software Framework
 - Notice Framework
 - Sumstats Introduction
 - Building Bro
 - Working with Branches
 - Minimal Bro Configuration
 - Bro Control Basics
 - Bro Cluster Overview
 - Troubleshooting and Tuning Sensor Configurations
 - Bro Policy Directory
 - **Part 3 – Arista EOS workshop (Optional) 3:00 – 4:00**
 - Extensible Operating System (EOS) overview
 - Features
 - Scalability
 - Visibility
 - Automation

Presenters: Jason Zurawski(ESnet), Eli Dart (ESnet), Mary Hester (ESnet)

- **Day 1 (Tuesday, Sept 16th - 7 hrs total) = Science DMZ**
 - **Breakfast (8am - 8:30am = .5hr)**
 - **Morning 1 (8:30am - 10:00am = 1.5hrs)**
 - 45 Min = Workshop Introduction & Need for Science Engagement
 - **Presented by Jon-Paul and Mary**
 - Purpose of event, introduction to problem space
 - 45 Min = Science DMZ Introduction and Architecture
 - **Presented by Eli**
 - About ESnet, Motivation for design pattern, Architecture discussion, equipment choice
 - **Break (30 min)**
 - **Morning 2 (10:30am -12:30pm = 2 hrs)**
 - 30 Min = Science DMZ Introduction and Architecture (cont.)
 - 60 Min = DTN Design/Data Transfer Tools
 - **Presented by Eli/Mary**
 - Overview of hardware, use of software.
 - 30 Min = Science DMZ Security
 - **Presented by Eli**
 - Security Discussion, techniques, policy
 - **Working Lunch (12:30pm - 1:30pm)**
 - **Topic 1: Science DMZ Deployment Strategies for CC-NIE/CC-IIE Awardees**
 - **Topic 2: perfSONAR Futures: What works, doesn't work, and is missing from the framework?**
 - **Afternoon 1 (1:30pm - 3pm = 1.5hrs)**
 - 45 Min = Globus Presentation & Hands on
 - **Presented by Jason**
 - Presentation on Globus as a data transfer tool
 - Hands on component (with home work assignment)
 - Server component install + client application
 - 45 Min = perfSONAR & Network Monitoring
 - **Presented by Jason**
 - pS Overview. Tool use and setup. Hands on component
 - **Break (30 min)**
 - **Afternoon 2 (3:30pm - 5:30pm = 2 hrs)**
 - 1 Hour = perfSONAR & Network Monitoring
 - 30 Min = Community Talks
 - Conan Moore - University of Colorado
 - 30 Min = Discussion Topics, Questions, Spill
 - **Presented by ESnet**

Presenters: Tom Johnson (GRNOC), Ed Balas (GRNOC), Matt Zekauskas (Internet2)

- **Day 2 (Weds, Sept 17th - 7 hrs total = SDN & AL2S)**
 - **Breakfast (8am - 8:30am = .5hr)**
 - **Morning 1 (8:30am - 10:00am = 1.5hrs)**
 - 60 Minutes = SDN Building Blocks, & Current State
 - Presented by IU Staff
 - 30 Minutes = OpenFlow Tutorial
 - Presented by IU Staff
 - **Break (30 min)**
 - **Morning 2 (10:30am -12:30pm = 2 hrs)**
 - 30 Minutes = OpenFlow Tutorial
 - 1.5 Hour = OpenFlow Hands-on Exercise
 - Presented by IU Staff
 - **Working Lunch (12:30pm - 1:30pm)**
 - **Topic 1: SDN Integration Strategies for CC-NIE/CC-IIE Awardees**
 - **Topic 2: Encouraging SDN adoption by application developers and scientific users**
 - **Afternoon 1 (1:30pm - 3pm = 1.5hrs)**
 - 45 Min = SDN Troubleshooting Exercise 1
 - 45 Min = SDN Implementation Considerations (Hardware, Controller Software, Testing)
 - Presented by IU Staff
 - **Break (30 min)**
 - 45 Hour = SDN Troubleshooting Exercise 2
 - Presented by IU Staff
 - 30 Min = How to Connect to AL2S
 - Presented by Matt
 - 15 Min = Discussion Topics, Questions, Spill
 - Presented by IU Staff