### All-in-one PDV (APDV) Control, Analysis, and Reporting Software

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### Outline

- Acknowledgements
- Purpose
- Previous LLNL PDV Control Software
- All-In-One PDV Control
- Summary



### Acknowledgments

- Long Tran
- Randy Bonner
- Jose Sinibaldi



### Purpose

- Simplify system controls
- Document system configuration
- Integrate control, analysis, and reporting into one executable



### **Software History**



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## **Requirements For Software**

- Control and monitor up to five PDV systems
  - IPG Photonics lasers, Tektronix oscilloscopes, RIO Orion laser modules, Variable attenuators, Optical power monitors
- Document system configurations
- Provide an easy data processing interface
- Generate a quick report



#### UNCLASSIFIED PDV Ops Advance Menu Bar





### **Load Previously Saved Setup Files**

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### **Specify System Components**

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### **Configure Oscilloscopes**

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Load Setup



### **Laser Power / Attenuator Adjustment**



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### **View From IP Camera**



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# **Optical Power Monitor Displays**





### **Overview Of Systems**

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### Main Menu Bar





# UNCLASSIFIED Data Processing Application



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### **DiCon 1x64 Switch Integration**



Tool Menu also contains the Fiber Optic Connect test panel And Report Generation menu





## **Heterodyne Tuning**

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## Summary

- Multi-Use PDV Control, Analysis, and Report generation.
- Can handle up to 5 systems
- LabVIEW executable
- Windows compatible
- Still want to implement Luna OBR measurements with the DiCon switch



