RELAP5-3D Auxiliary Tools
2015 Update

Hope Forsmann

RELAP5 International Users Seminar
Date: August 13, 2015
Introduction: Updates and Upgrades and Plans

• RGUI
• PYGI
• R5EXEC
**RGUI Plans**

- No Updates or Upgrades to report
- Plans
  - Batch Execution Capability
  - Isometric Plotting…. REALLY
PYGI Bug Fixes

• A variable pvt_num was set to 20 and allowed to double allocated space to accommodate more volumes
  – Doubling logic was incorrect
  – Set it to 100 (since there are only 99 possible in RELAP5-3D).

• Issue with the multiple junctions and continuation lines
  – + for continuation lines is a known issue
  – Just list lines individually
  – On back burner as work around exists.

• Machine dependent binary for F90
  – Format was changed
  – Made modifications but work in RELAP5-3D is ongoing
  – More are likely needed to complete this task.
R5EXEC Updates and Plans

• Background
  – PVMEXEC utility written in 2005 by Walt Weaver
  – Uses PVM for the message passing interface
  – Couple RELAP5-3D to RELAP5-3D and other codes.

• Updates
  – R5EXEC (formerly known as PVMEXEC)
    • Updated all three programmers manuals
    • Updated the users guide
    • Modified the RELAP5-3D scripts and directories.

• Plans
  – PVM installed on Windows
  – Build R5EXEC for Windows release.
Summary of TODO list

- **RGUI**
  - Batch Execution
  - Plotting

- **PYGI**
  - Continue working binary file issues
  - Search for solution to the multiple junction input issue

- **R5EXEC**
  - Install PVM on Windows
  - Build R5EXEC for Windows
  - Test and provide in next released version

- Stay tuned….