Multics: The First Fifty Years

1964  1965

1967  1969

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Multics: The First Fifty Years
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- Literature is based on Gen 1 Multics
- Gen 2 Multics improved upon Gen 1
- Gen 2 Multics included more features
- There is a gap in the Body of Knowledge
- For the fiftieth anniversary, update the model that academia sees.
Initiative 1: A New Text

- The follow-on processor was delivered as Organick's book was being published
- There is no equivalent comprehensive reference guide for the 6180/DPS8M
- Part one of an updated text can follow original book

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Initiative 1: A New Text

- Additional chapters can include important features added through Multics' history
  - Non-discretionary access control
  - Journalized file management
  - Relational database and query language
  - B2 certification
  - Communications and networking
Initiative 2: A Multics Conference

- A nostalgia conference won't work
- A fifty year retrospective of design
  - Include derived operating systems
  - Foster a sense of history
- “Comparative Anatomy” of key features
  - Can Linux on Intel do things better?
  - Contribute to Bull HN's goal for MR 12.5
Initiative 2: A Multics Conference
Initiative 2: A Multics Conference

- Nothing but questions
  - Who to approach
  - What to propose
  - Call for papers?

- Need to activate this initiative now
  - Fall 2015 is closer than you think
  - Logistics need to be locked in
Initiative 3: Multics in the Cloud
Initiative 3: Multics in the Cloud

- Complete a 6180/DPS-8M Virtual Machine
- Run Bull HN MR 12.5 on the VM
- Current efforts
  - Harry Reed emulation runs under SimH and uses SourceForge source control
  - Michael Mondy emulation runs under SimH and uses GitHub source control
  - Each appears stuck at the first page fault
Initiative 3: Multics in the Cloud

• My role
  - Find university talent at this level
  - Broker talent to be brought to bear on development issues
  - Get my hands dirty if needed
  - Push for first light in the fall of 2015

• Possibility of undergrad work on emulator can lead to the conference call-for-papers
Initiative 1: Revisited

• Is the proposed text enough?
  – The model for introduction and use of Multics was Honeywell Education
  – How does the professor or student bring up a system and administer it?
  – What about the command repertoire?

• Are multiple volumes in order?
Initiative 1: Revisited
Multics: The First Fifty Years

- Bring up one or more Cloud Multics instances
- Conference (and call for papers) with a strong Multics (50 year) theme
- Text / User Guides to reinforce the conference and help run the Multics systems

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I cannot do this without your help

It is amazing what you can accomplish if you do not care who gets the credit.

- Harry S. Truman
Multics: The First Fifty Years

- Web presence at multics50.org
  - Web site will be up within a week
  - Email addresses for info and volunteering
  - Forum for general discussion

Thank You!!