

Report from Computing Stack Group

Why do we want a new stack?

- Performance vs. Productivity
- Diversity?
- Existing stack imposes obstacles for parallelism
- Security & privacy concerns

Why do we want a new stack?

- Performance vs. Productivity
- Diversity?
- Existing stack improving parallelism
- Security

Can we trust what the layer above me
might have done with the slides?

A problem has been detected and windows has been shut down to prevent damage to your computer.

DRIVER_IRQL_NOT_LESS_OR_EQUAL

If this is the first time you've seen this Stop error screen, restart your computer. If this screen appears again, follow these steps:

Check to make sure any new hardware or software is properly installed. If this is a new installation, ask your hardware or software manufacturer for any windows updates you might need.

If problems continue, disable or remove any newly installed hardware or software. Disable BIOS memory options such as caching or shadowing. If you need to use Safe Mode to remove or disable components, restart your computer, press F8 to select Advanced Startup options, and then select Safe Mode.

Technical information:

*** STOP: 0x000000D1 (0x0000000C,0x00000002,0x00000000,0xF86B5A89)

*** gv3.sys - Address F86B5A89 base at F86B5000, DateStamp 3dd991eb

Beginning dump of physical memory
Physical memory dump complete.

Contact your system administrator or technical support group for further assistance.

Questions to ask ourselves when designing a new stack

- What part of the stack is most broken?
- What can we change?
- Should we focus on a single layer?
- How do we evaluate and quantify the result?
- How to demonstrate how much progress we made?
How far are we from the best we can do within this layer? Or across all layers?
- Do we need limit studies to measure the degree to which we're squandering our resources?
- What are the right interfaces between layers?
- But the big question is...