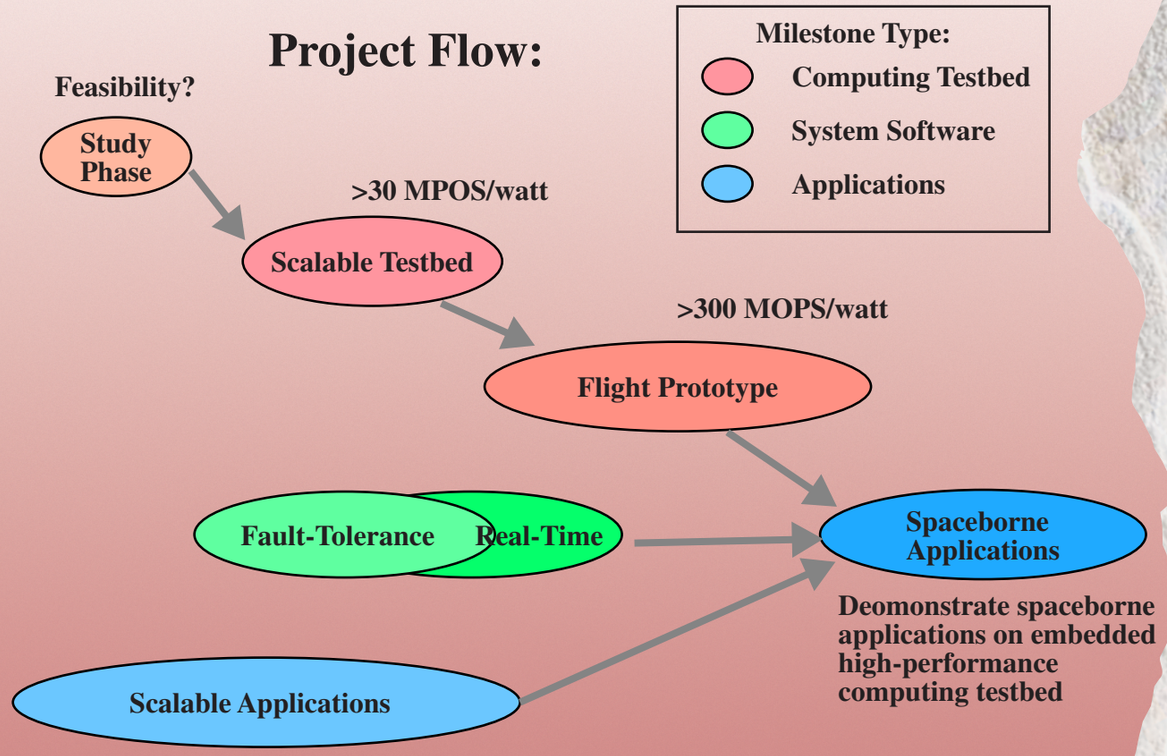
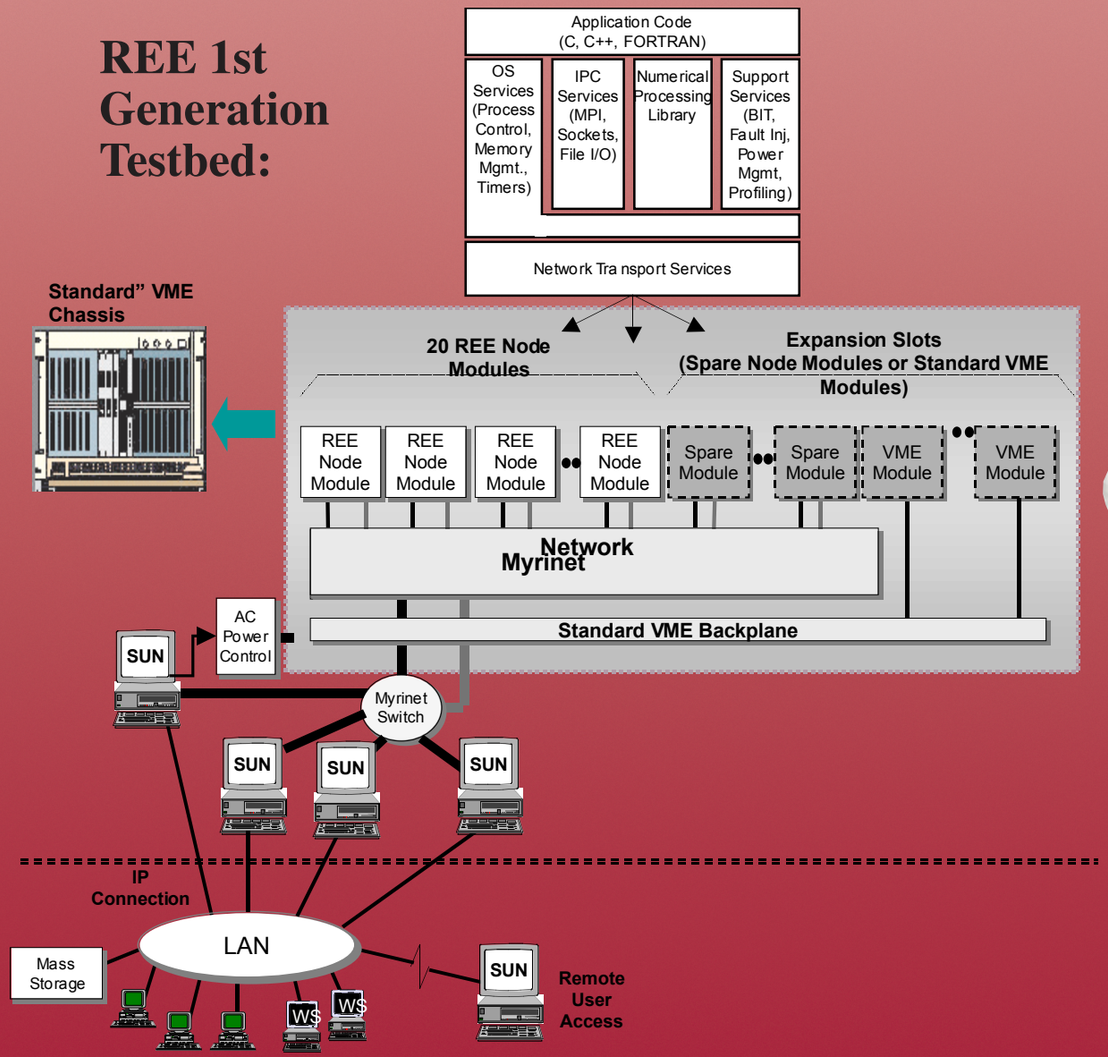
Project Flow:



REE 1st Generation Testbed:



The Remote Exploration and Experimentation (REE) Project

Transition State-Of-The-Art Supercomputing to Space
- From Commercial Availability to Space in 18 months
- 100X Performance over Current Systems
- Applications Development on Commercial Systems

Enable New Missions and New Science
- Perform Science Processing Onboard Spacecraft
- Enable Full Utilization of Space-Based Instruments
- Mitigate Spacecraft Communications Bottleneck

Fault Handling Through Software-Implemented Fault Tolerance (SIFT)
- System Level Fault Tolerance Support
- Application Level Fault Detection and Tolerance

Flexible and Adaptable
- Extensible to 50 Nodes
- Parallel and Distributed Processing
- Multiple Levels of Fault Tolerance and Performance on a Per-Process Basis

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