

Integration Requirements for ATCA

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Requirements

What are the aspects of the ATCA "ecosystem" that are critical for building an HA control system?

- IPMI (Integrated Platform Management Int.)
 - FRU identification
 - Power management (on/off)
 - CPU reset
 - Hot swap state
 - Flash memory bank select



Requirements

- Base Interface (Ethernet)
 - Dual star backplane (a given)
 - Console port redirection
 - Uniform access to all processor console ports
 - Code loads (FPGA, BIOS, etc.)
 - NFS mounts
 - Out-of-band monitoring protocols
 - SNMP
 - IPMI over RMCP
 - WBEM
- Fabric Interface
 - For "user" traffic, separate from Base Interface functions (following Telecom model)



Requirements

- Operating System
 - Carrier Grade Linux
 - Current version 4.0 specification
 - Forceable file system unmount
 - Software ECC and memory event reporting
 - More robust process and memory monitoring
 - Live patching
 - CPU usage thresholds
 - Fast boot
 - Boot image fallback
 - Much more...