Master Node- MasterMerger Activity Diagram MasterMerger-main thread MasterMerger-worker thread Main-thread forks worker thread per slave set the slave id for each worker receive the slaveID and thread start tasks No. receive metadata and signal main thread Received Metadata from all slaves? Calculate full slice height, width, #slices create synchronized container & received chunk size? signal worker threads Deserialize slices and wait for container Are full slices written? No Get subset & refill container is container ready? with empty slices Write partial slices to full slices provide the container of ready slices to the next component. are all slices done? isLastChunk()?