

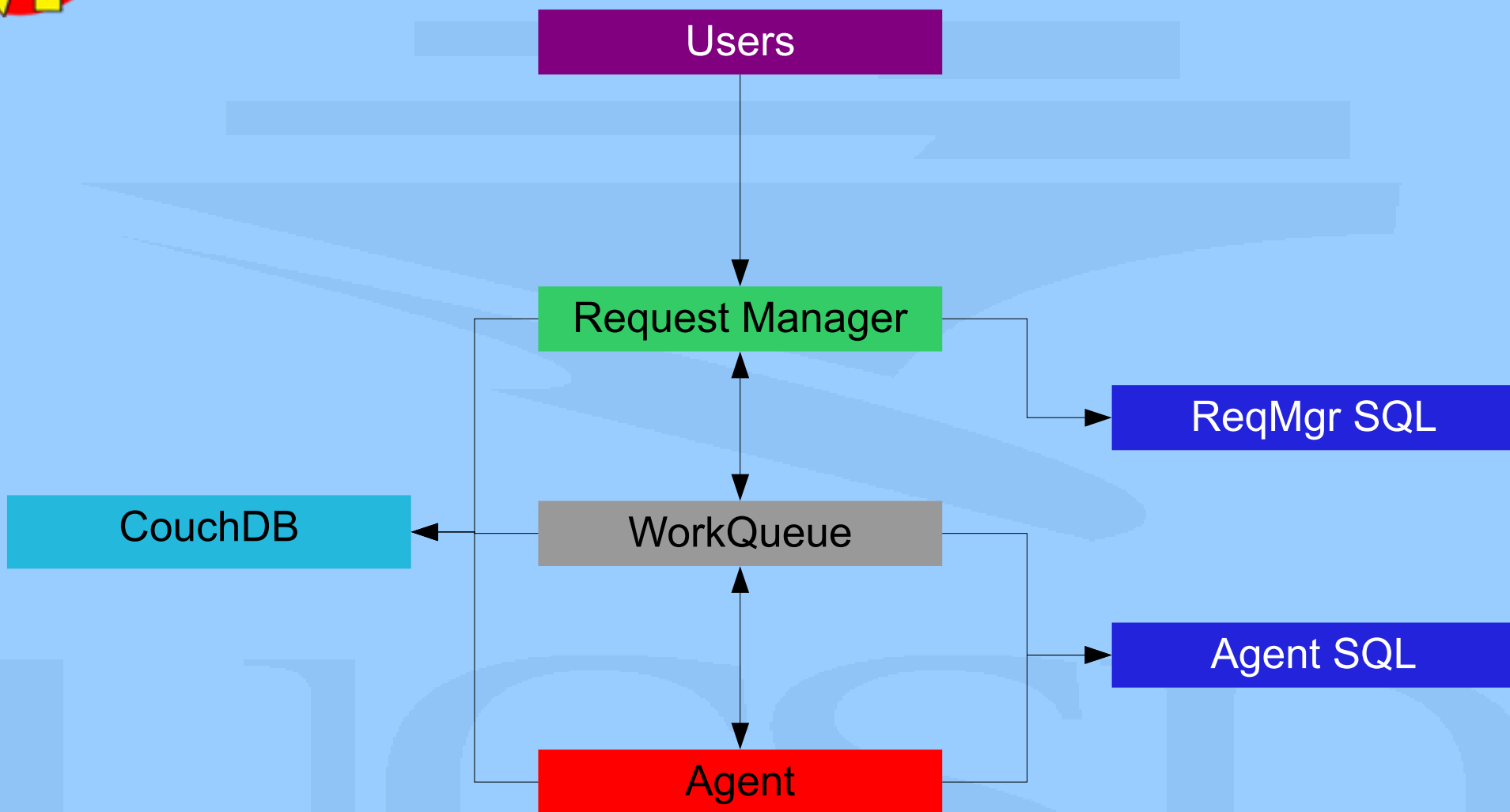


WMAgent Summary Overview

UCSD



Agent Overview





Workloads

Request Manager

WMWorkload

/Processing

Step: CMSSW

Step: StageOut

Step: LogArchive

/Processing/Merge

Step: CMSSW

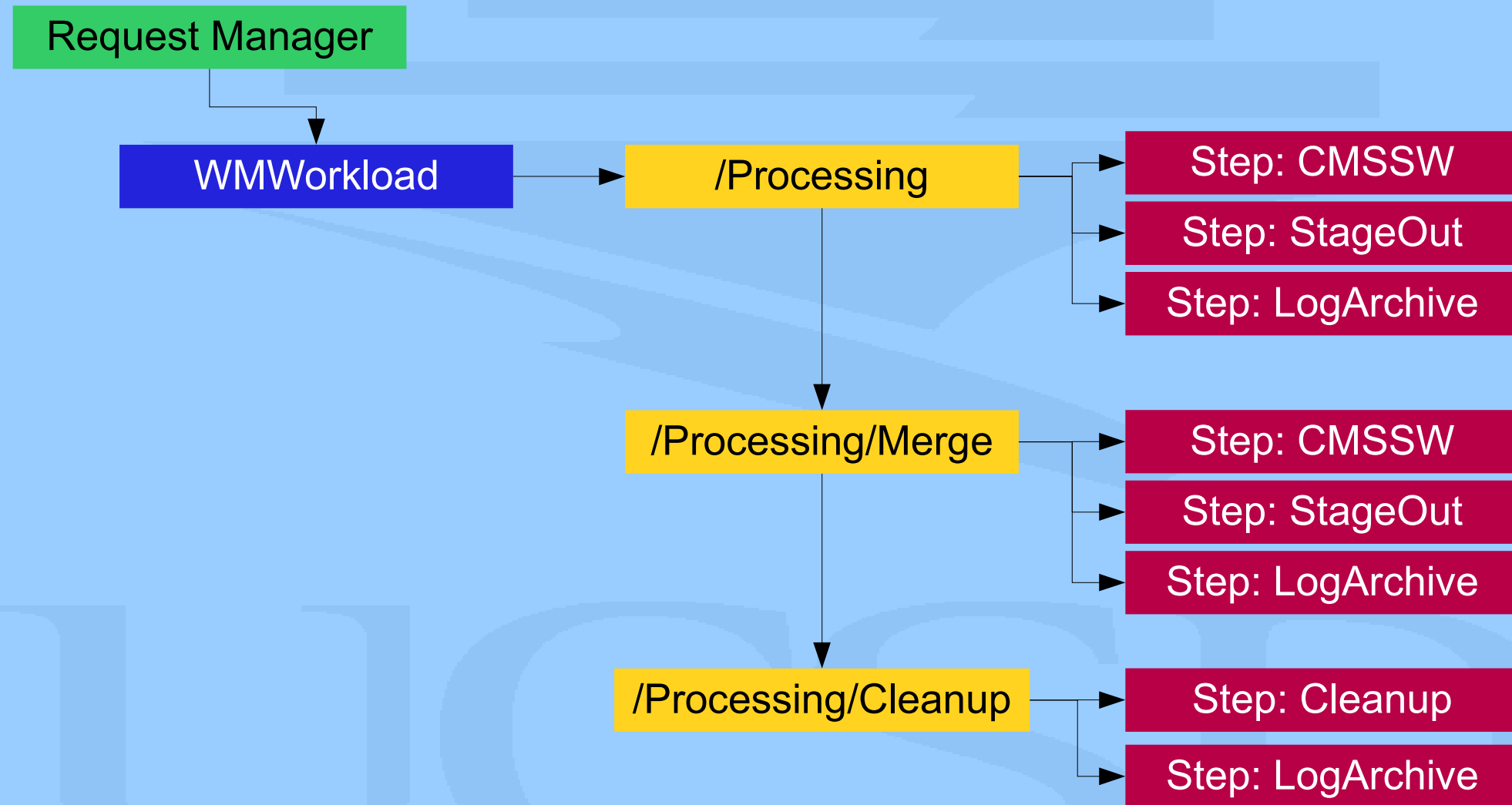
Step: StageOut

Step: LogArchive

/Processing/Cleanup

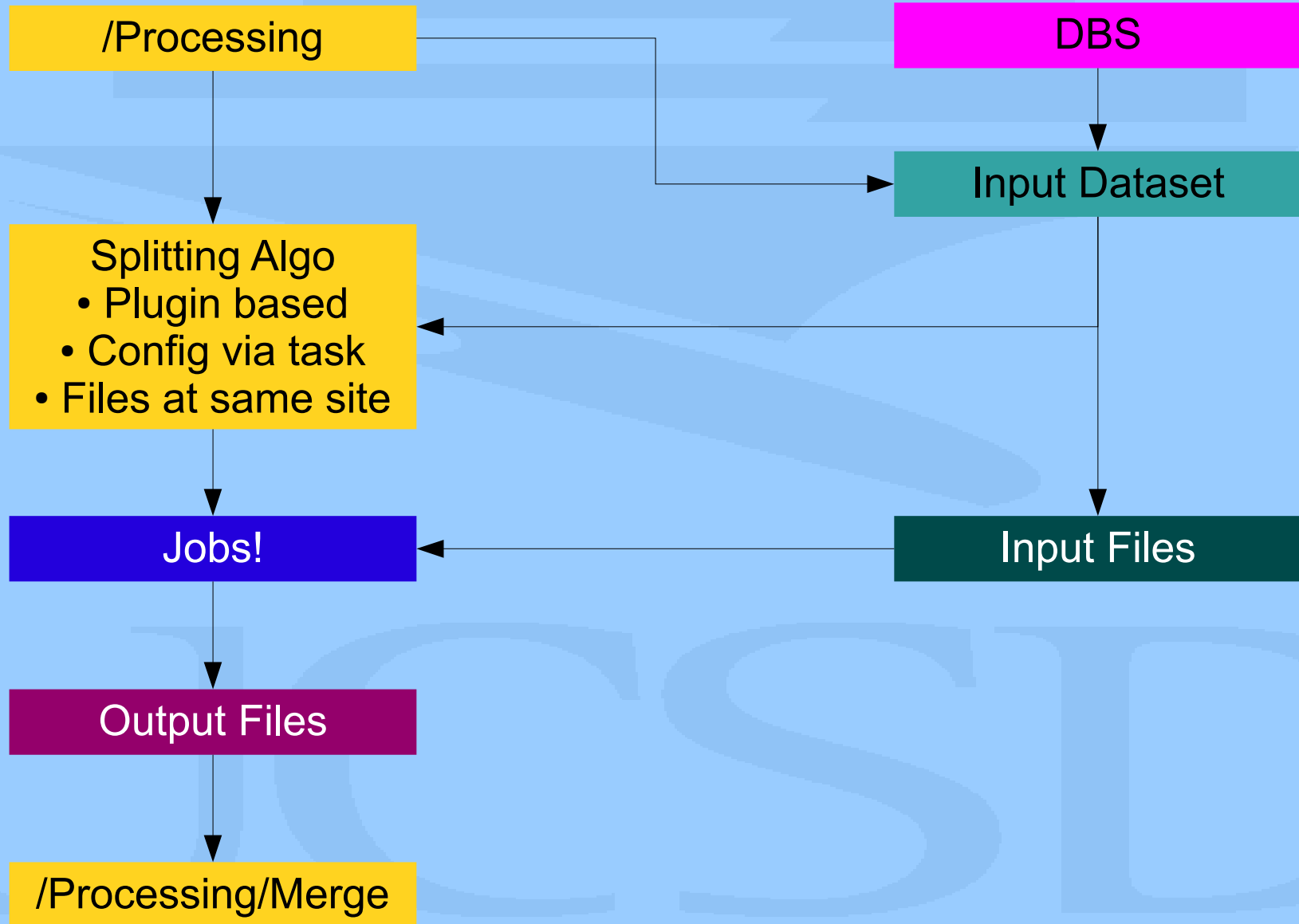
Step: Cleanup

Step: LogArchive



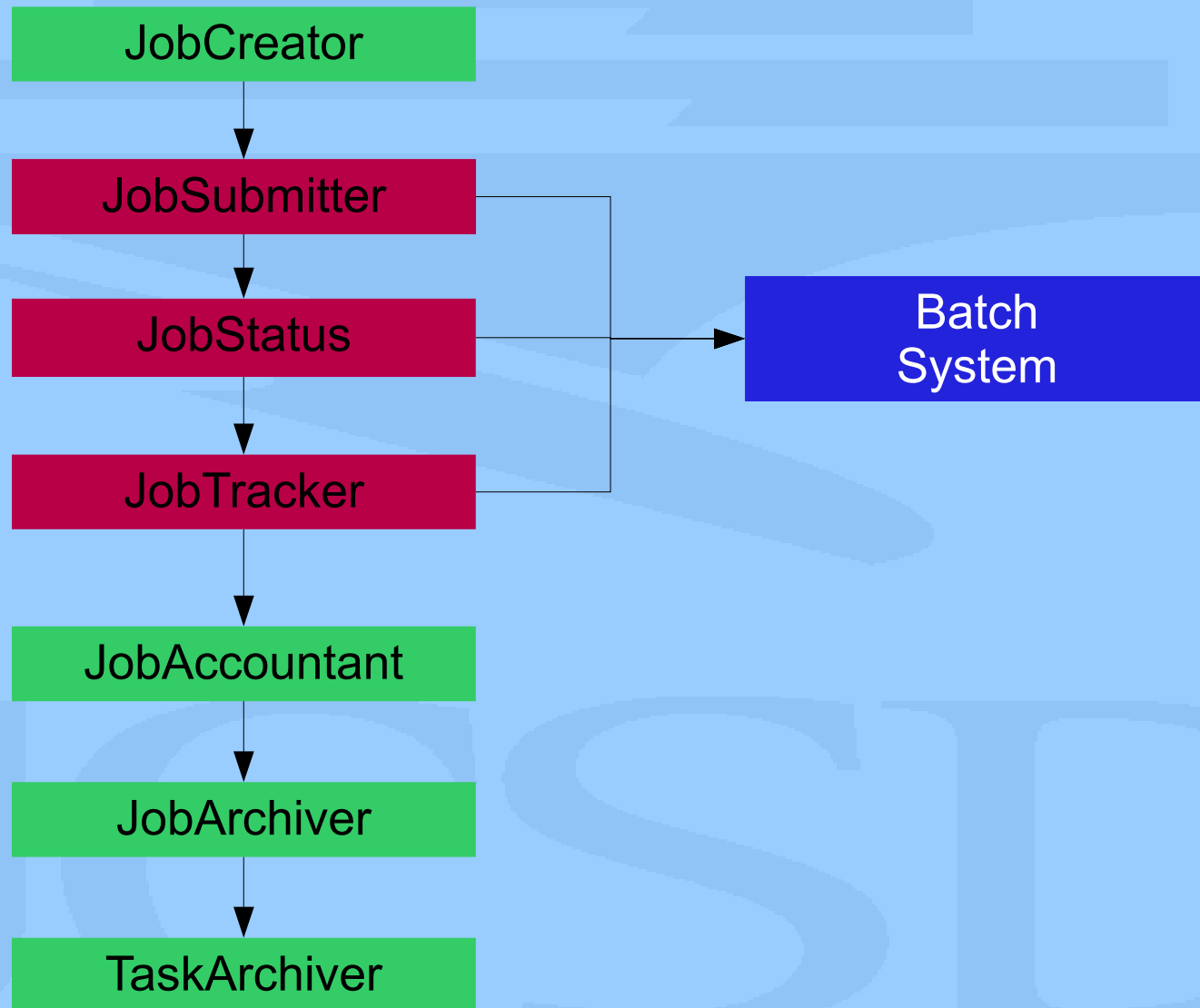


Jobs



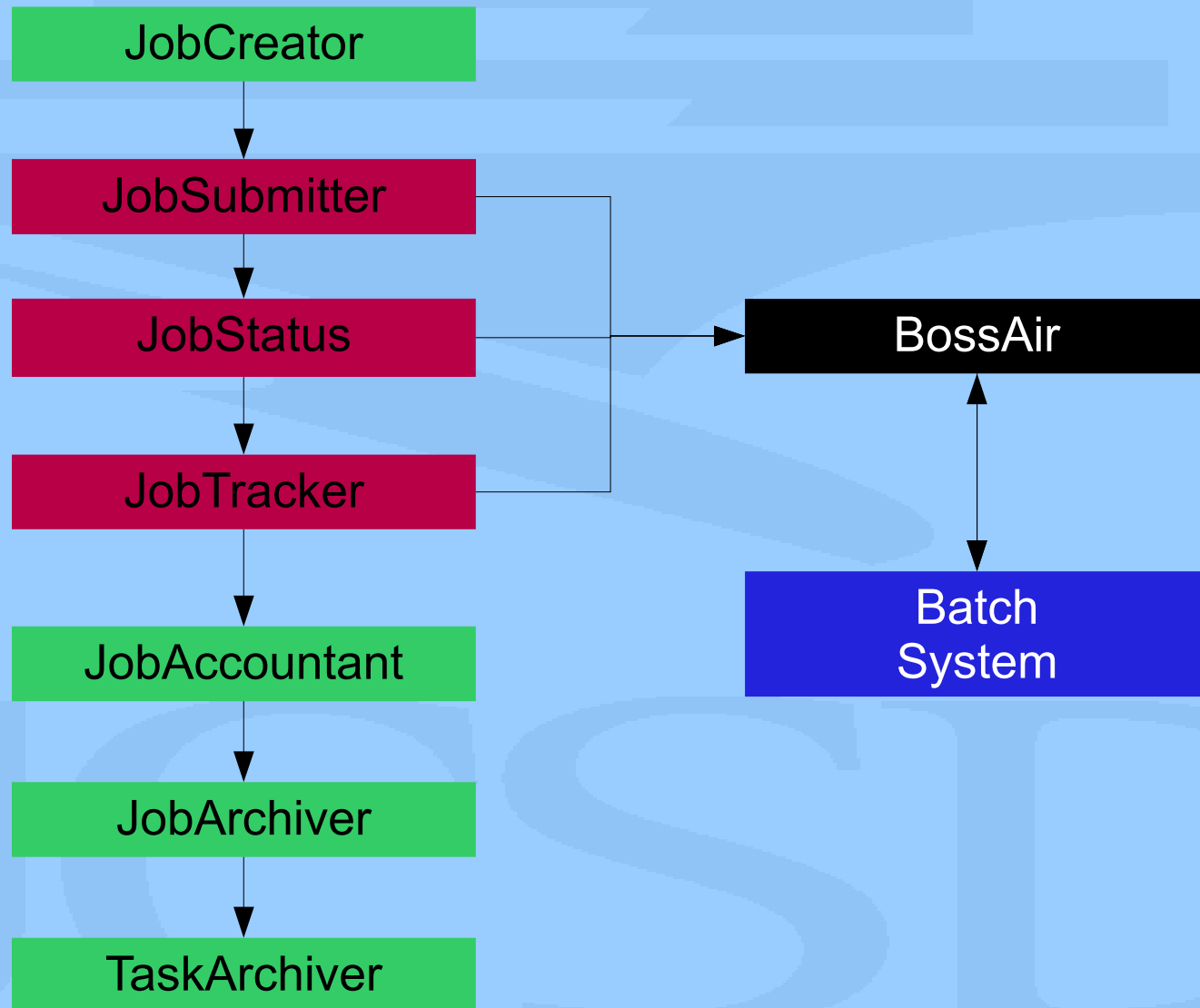


Agent Components



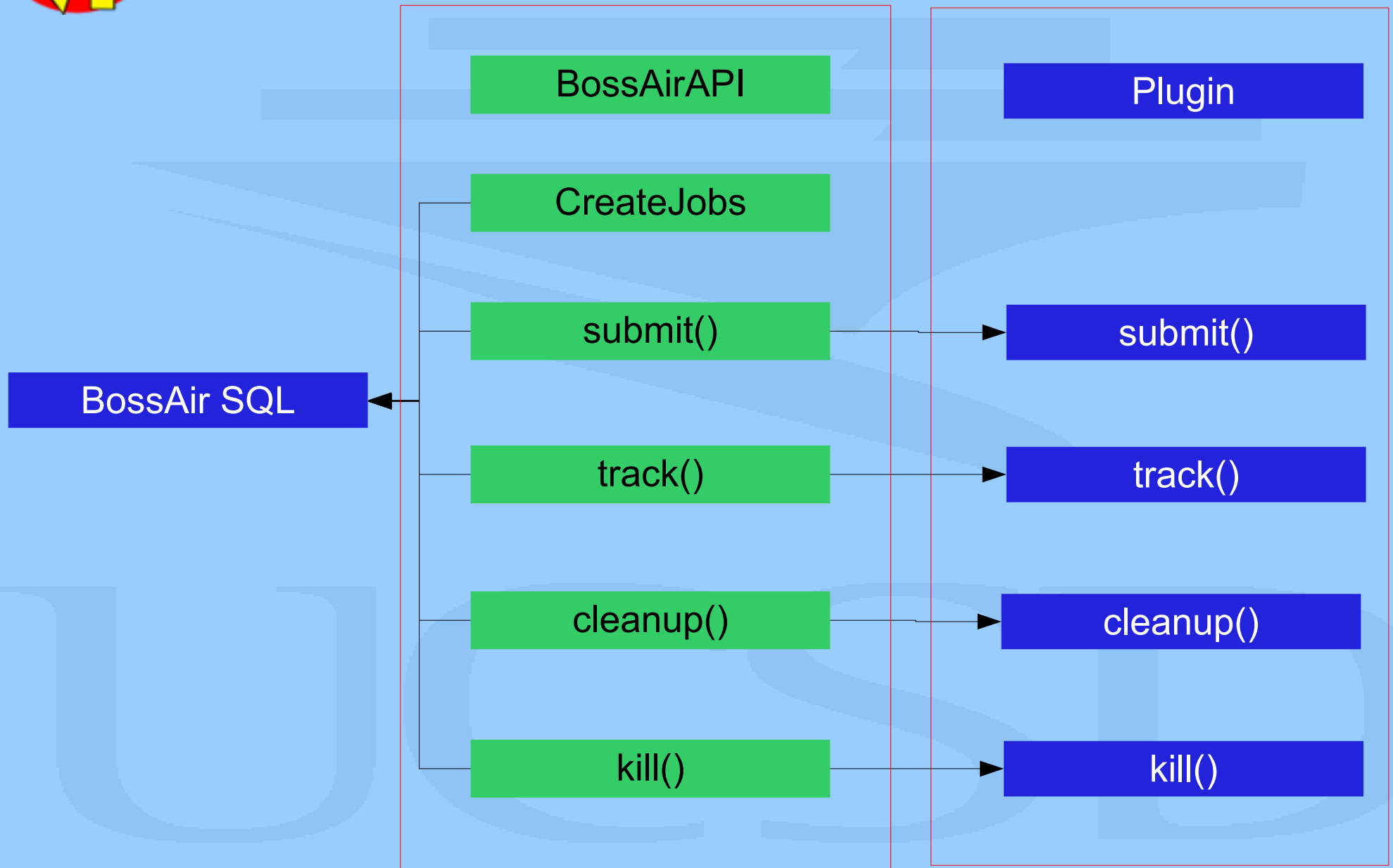


Agent Components II



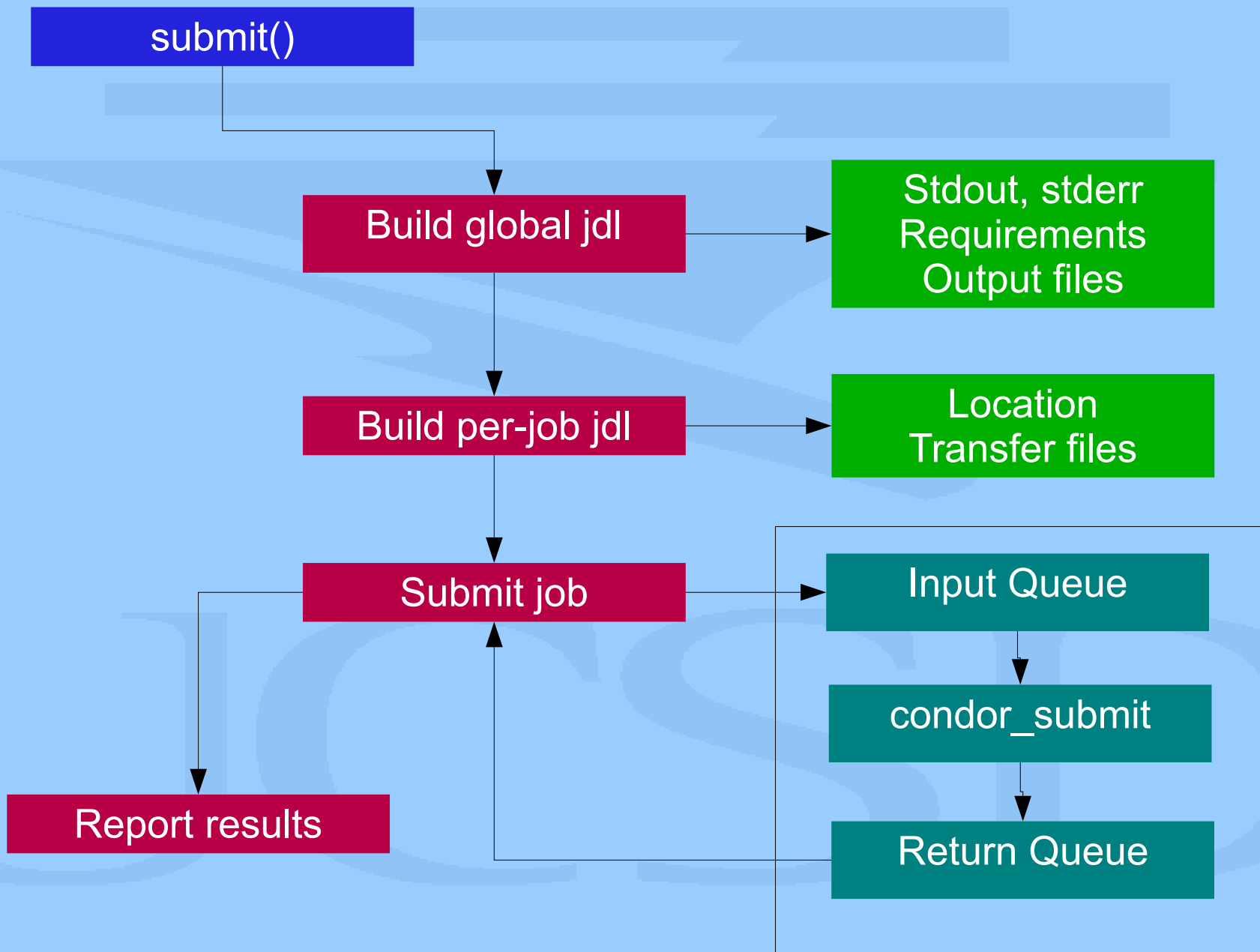


BossAir



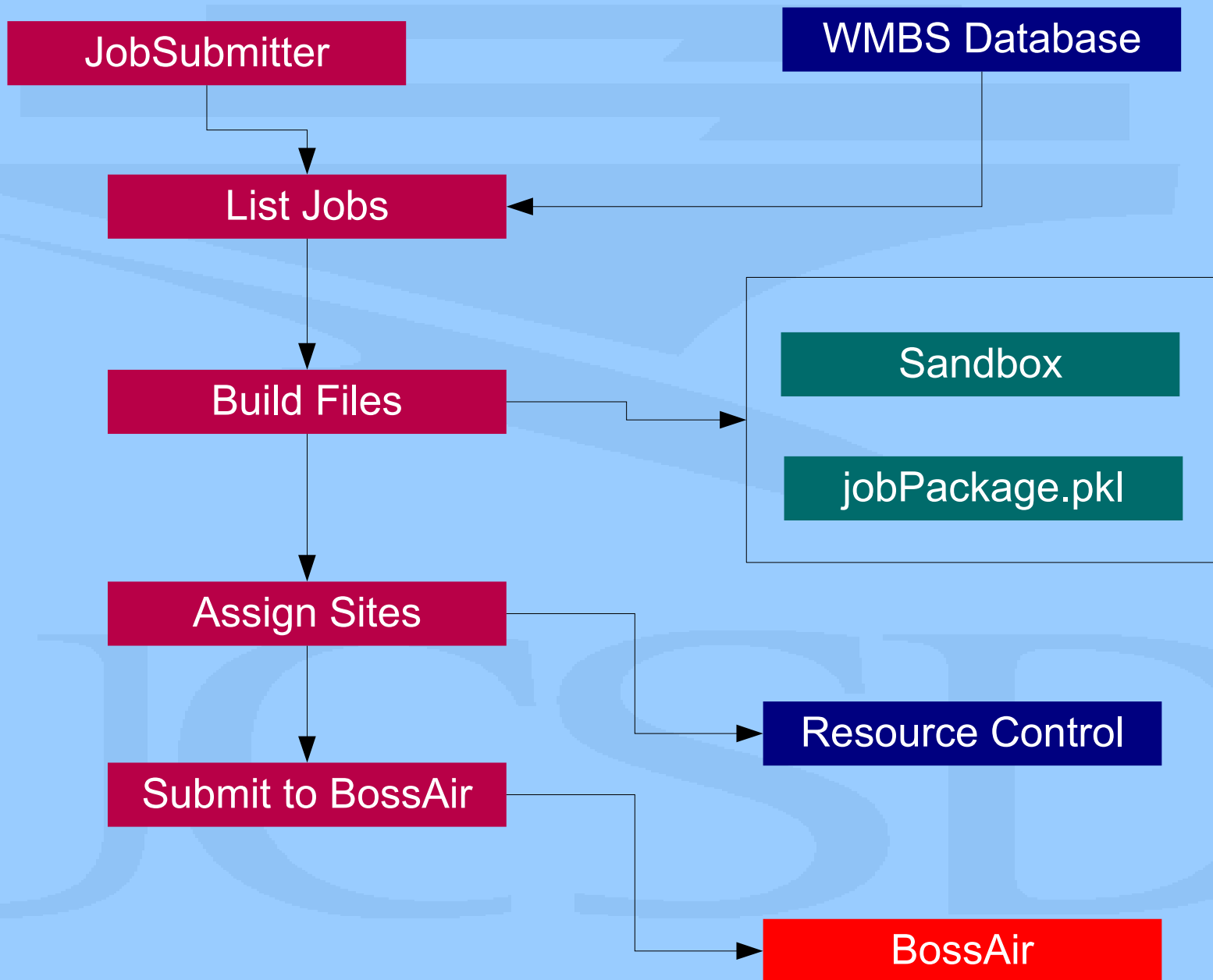


CondorPlugin submit()





JobSubmitter





Resource Control

Resource Control

wmbs_locations

CE Name

SE Name

CMS Name

Plugin

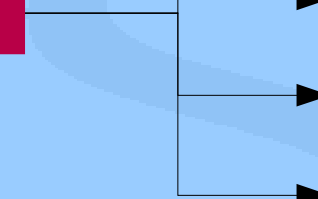
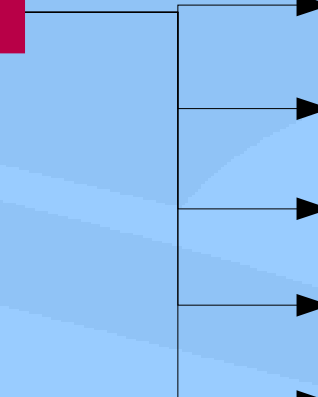
job_slots

rc_thresholds

Task type

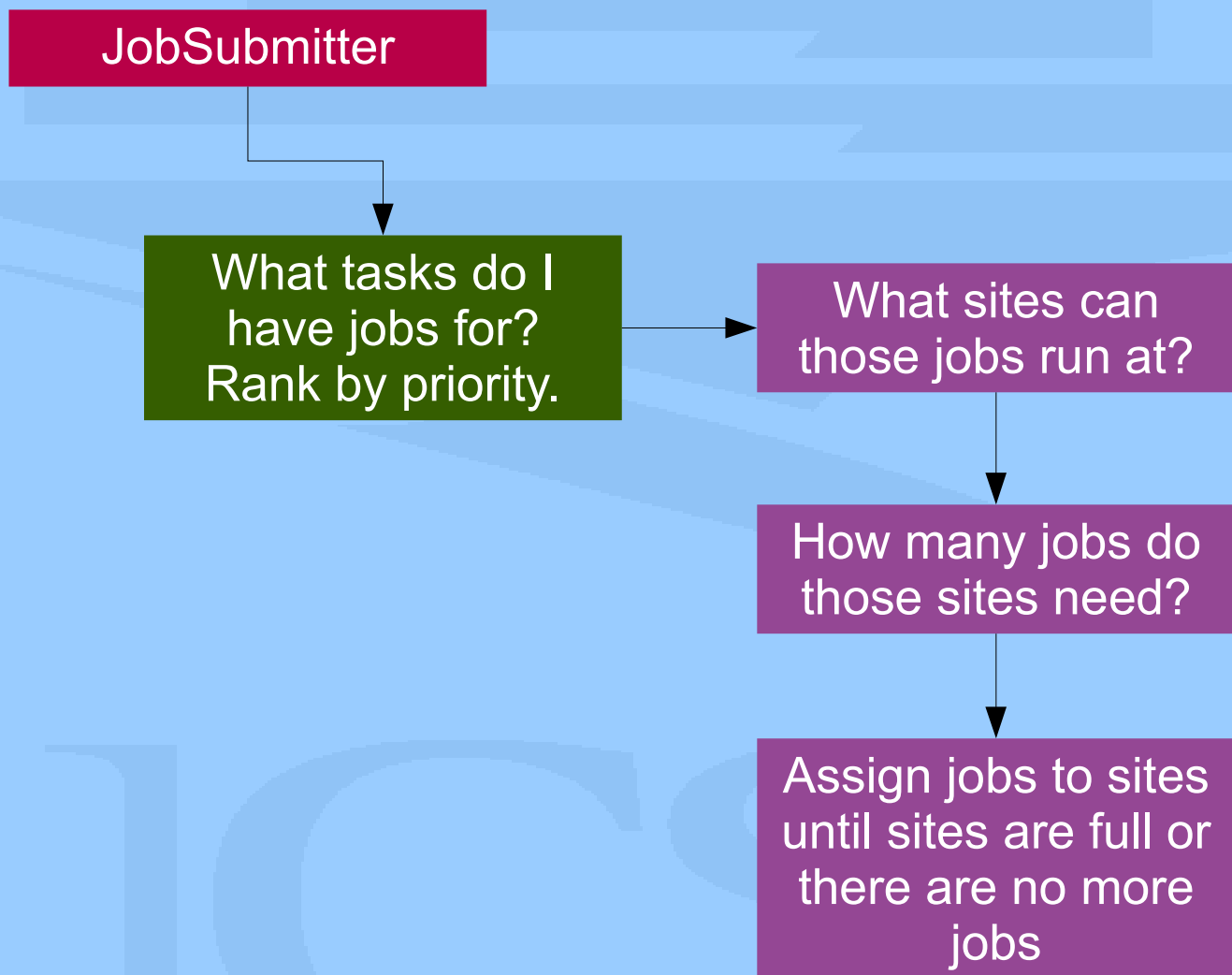
Task slots

Task priority



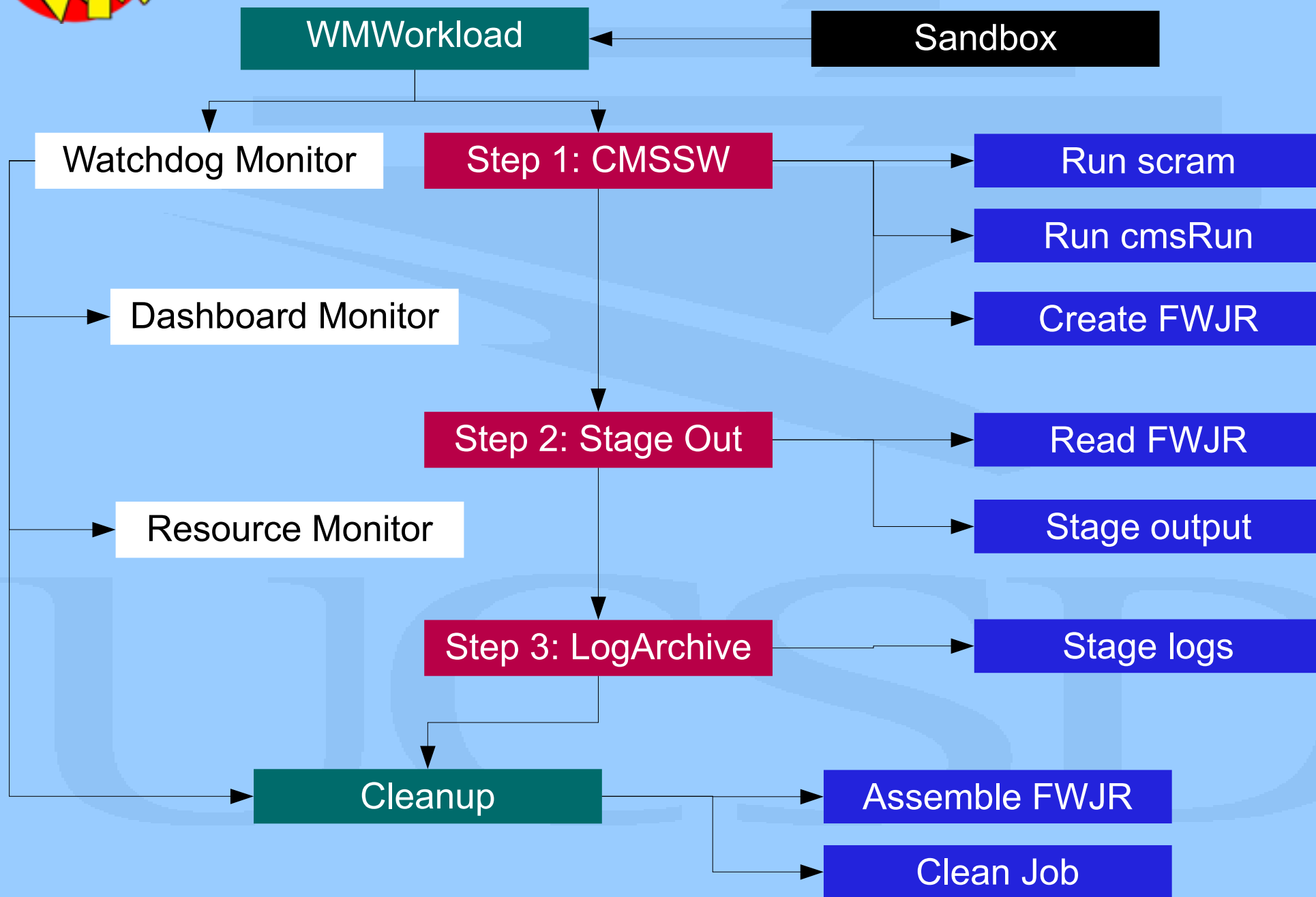


Site Selection





Worker Node





User Control

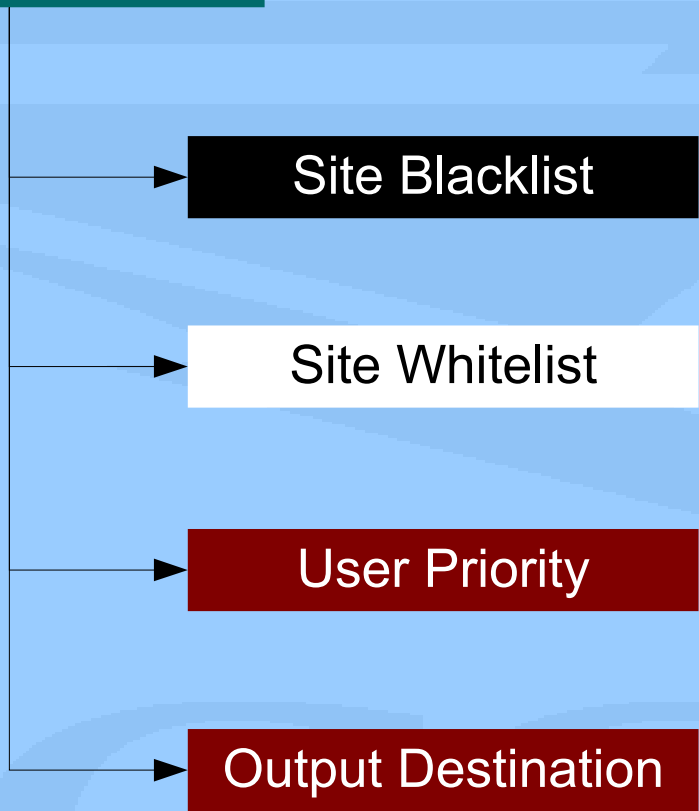
WMWorkload

Site Blacklist

Site Whitelist

User Priority

Output Destination





Operator Control: DataOps

Config Settings

Submission Sizes

Wait Times

Multiprocess #

Resource Control

Change available slots at site

Prioritize task

Disable or reduce task

Assignment

Change User Priority

Black/White list sites

Team-Based Control



Resource Control: WMS Mode

Resource Control

wmbs_locations

CE Name: WMS

SE Name: ALL

CMS Name: ALL

Plugin: WMS

job_slots: ∞

rc_thresholds

Task type: ALL

Task slots: ∞

Task priority: 1



Site Selection: WMS Mode

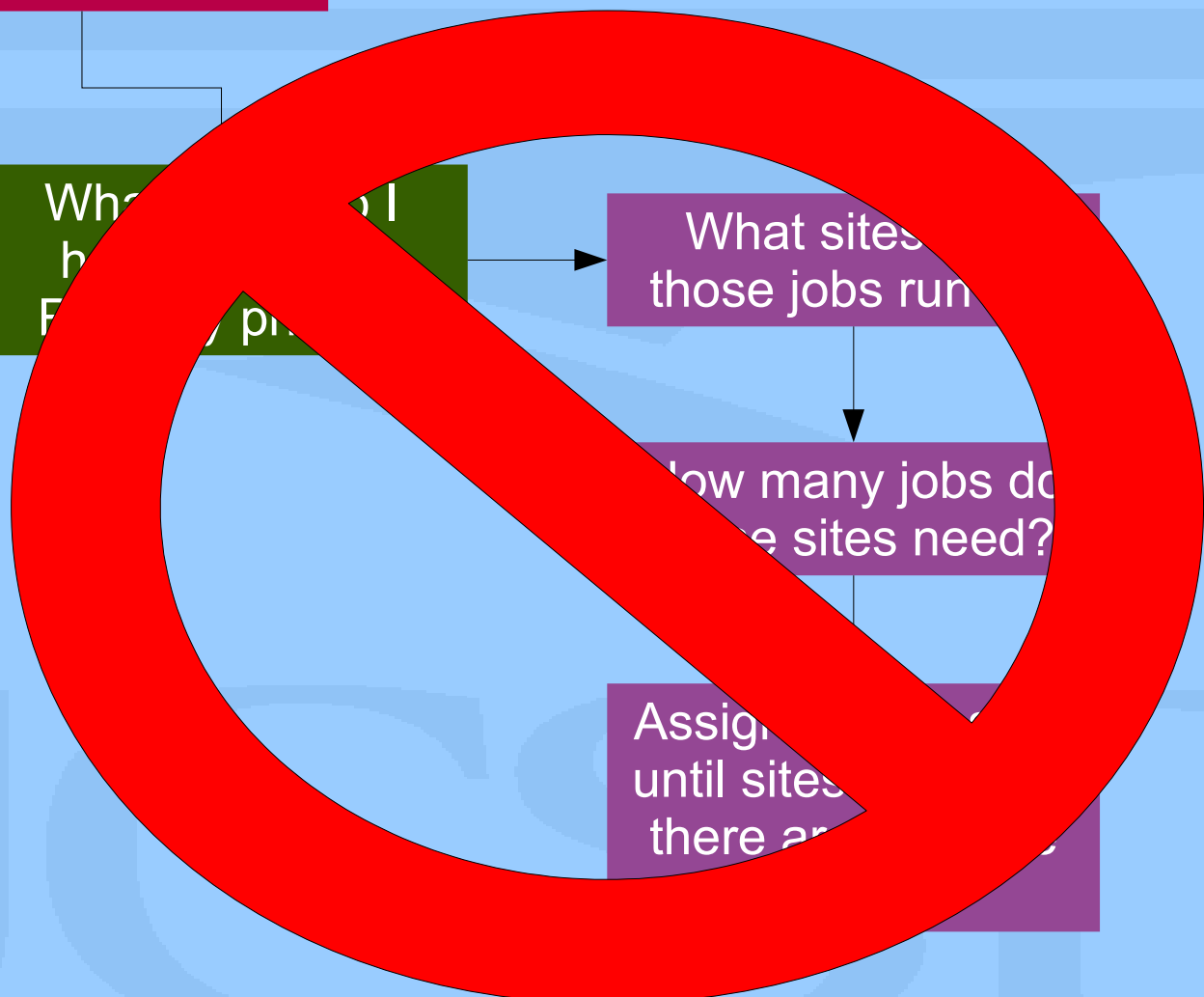
JobSubmitter

What
h
F
/ p

What sites
those jobs run

How many jobs do
the sites need?

Assign
until sites
there are





WMS Issues: Monitoring

- We lose track of what physical/CMS site a job is actually running on until it comes back.
 - We don't know.
 - We don't care.

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WMS Issues: Job Control

- We have no control over what user jobs enter the WMS.
 - A user can enter a million analysis jobs – we won't stop them.
 - More realistically, queue lengths get too long for short-term shut down.
 - This is primarily an operator issue.



WMS Issues: Debugging

- We don't actually support this anyway
 - There may be some noise about WMAgent/WMS diconnect causing debugging problems.
 - Prevents user micromanaging.
 - Feature, not bug?

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WMS Issues: The Problems

- We haven't tested it.
- We have been promised enormous boosts in performance which probably won't materialize.
- We haven't tested it.
- We haven't looked at whether our eagerness to pump out hundreds of thousands of user jobs will disrupt anything.
- We haven't tested it.
- Everything we do for a WMS has to work on gLite
- Have I mentioned that we haven't tested it?



WMS Summary

- We intend to use the WMS Mode as simply a “short circuit” to our site selection.
- We will depend on the proven stability of the WMS system to handle load and system issues.
- Basically, I'm lazy, so I'm using this as an excuse to make the WMS do all the work.