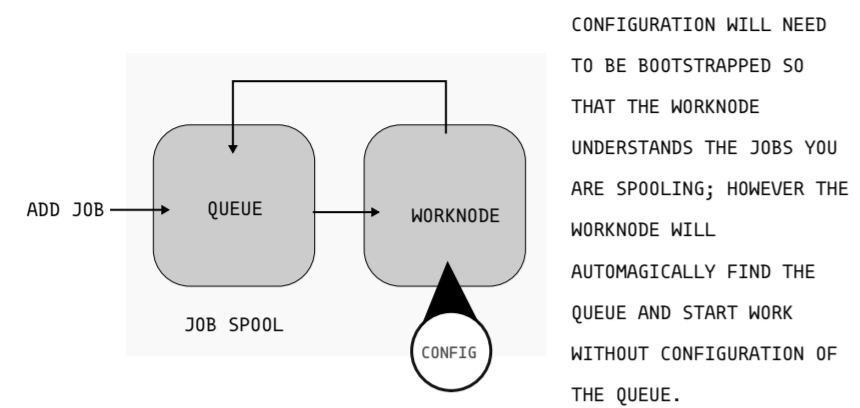


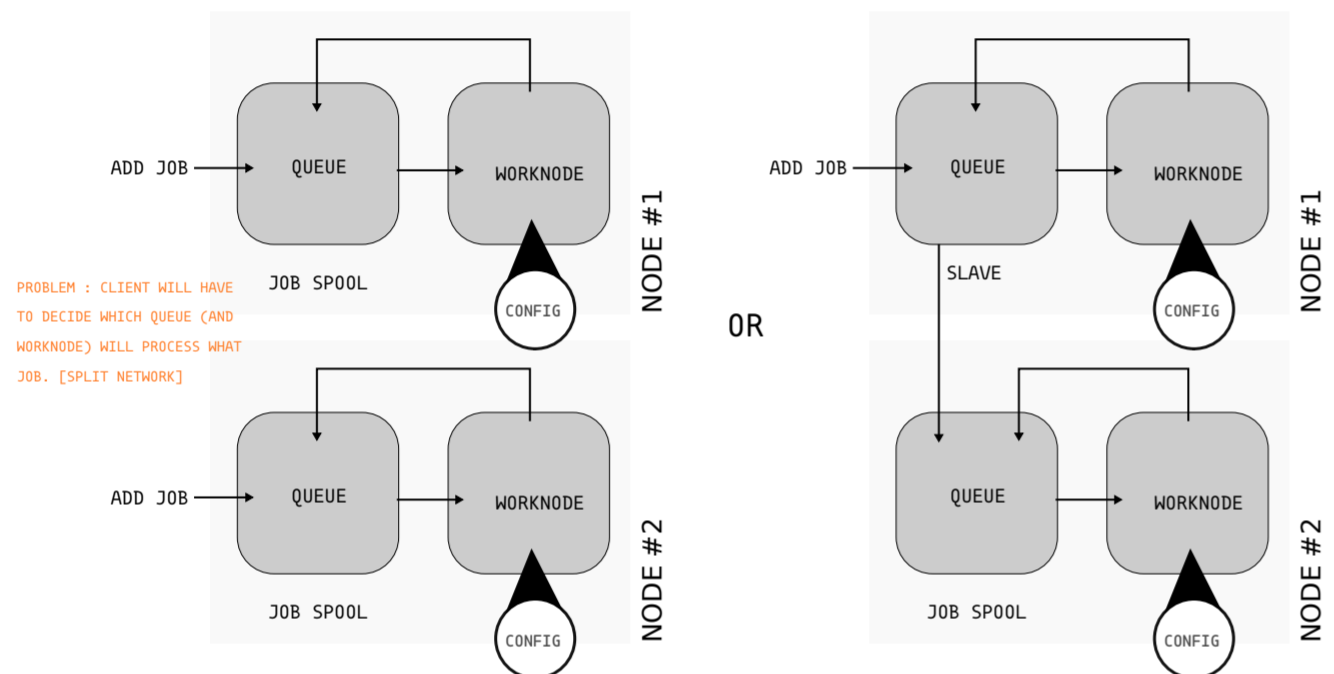
ONE HOST

SIMPLIST NETWORK SETUP of A SINGLE WORKNODE COMPLETING WORK FROM A QUEUE (JOB SPOOL) VERY MUCH LIKE HOW A NETWORK PRINTER WORKS.



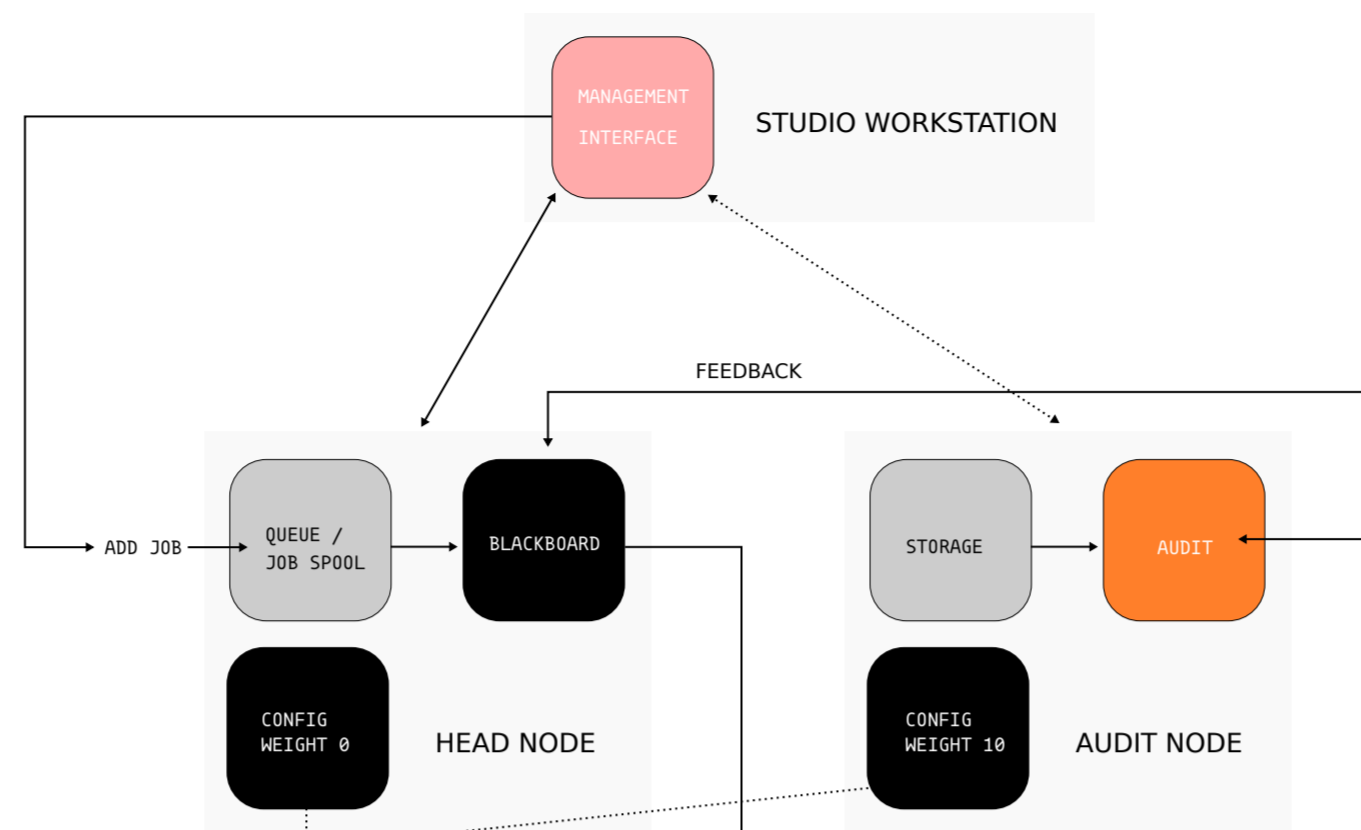
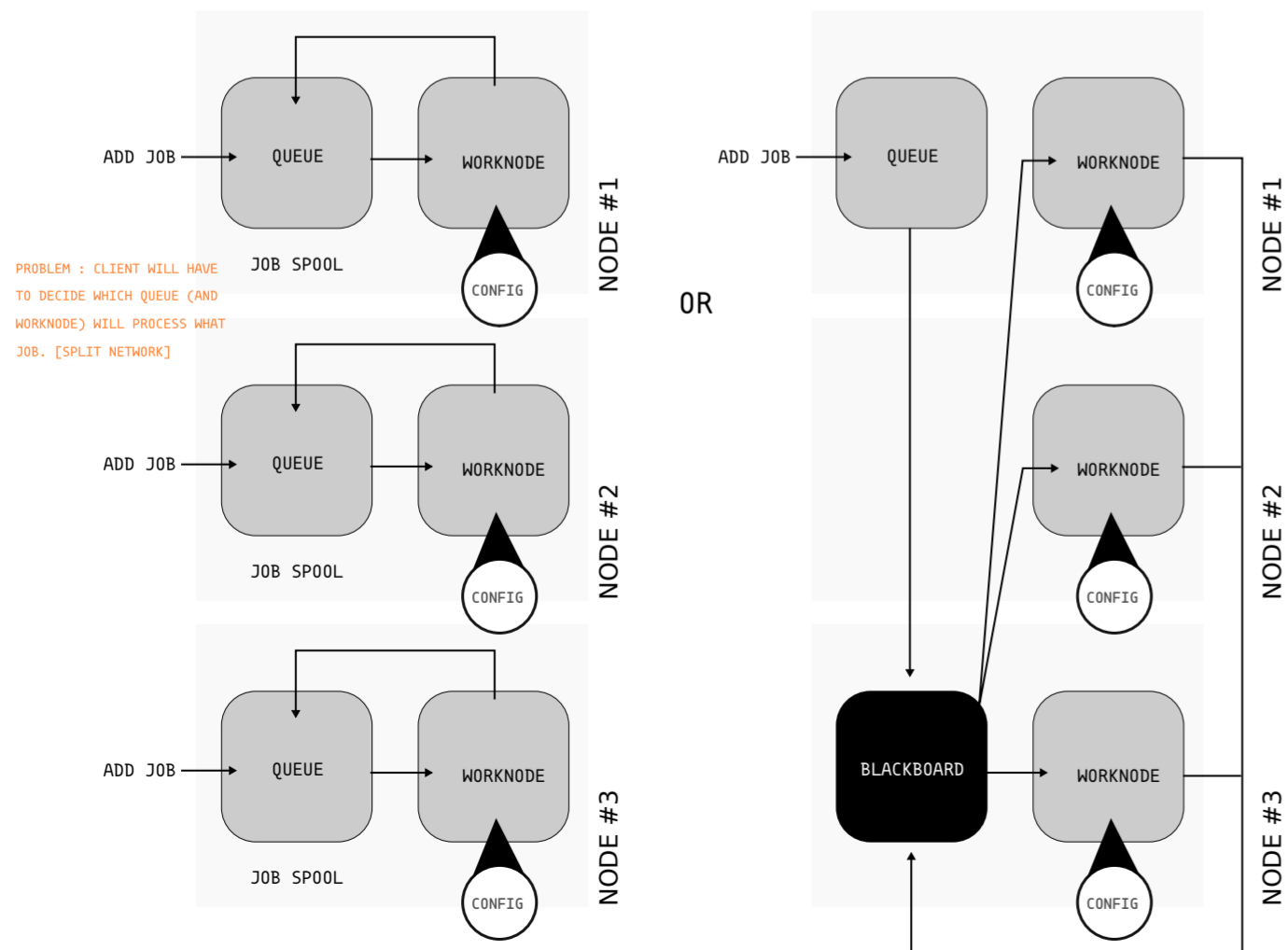
TWO HOSTS

ADDING A SECOND HOST (NODE #2) PRESENTS A QUEUING PROBLEM or MORE SPECIFICALLY AN ADMIN PROBLEM. SO WE SOLVE THIS BY MAKING THE SECOND QUEUE A SLAVE OF THE FIRST REDUCING THE QUEUING INPUT TO A SINGLE PLACE AGAIN.



THREE HOSTS

SOLVING THE QUEUE PROBLEM FOR MORE THAN 2 HOSTS USING SLAVES IS MORE COMPLEX; INSTEAD WE INTRODUCE A NEW COMPONENT BLACKBOARD. BLACKBOARD INJECTS JOBS VIA THE QUEUE AND PUTS UP EACH JOB FOR WORKERS TO COMPLETE.



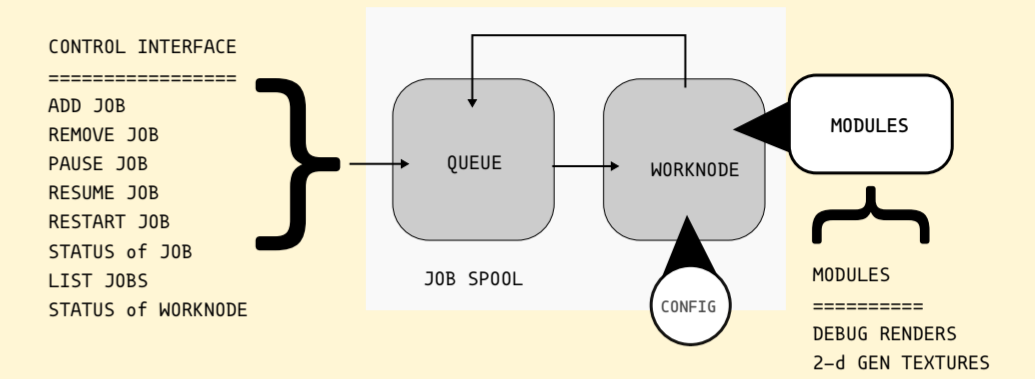
AUDIT NODE IS INCLUDED TO COMPLETE THE EXAMPLE, BUT IT IS NOT ACTUALLY REQUIRED.

NOTICE THAT A SECOND CONFIG SERVICE (WITH WEIGHT 10) RUNS ON THE AUDIT NODE; THIS ALLOWS CONFIGURATION SPECIFICS TO BE ADDED FOR THE AUDIT SYSTEM. WHEN THE AUDIT NODE IS ABSENT THEN THE SPECIFICS DO NOT APPLY BECAUSE THE CONFIG SERVICE IS ALSO ABSENT.

CONFIGURATIONS CASCADE BY WEIGHT FROM LOWEST TO HIGHEST. HIGHER CONFIGURATIONS CAN OVERWRITE LOWER.

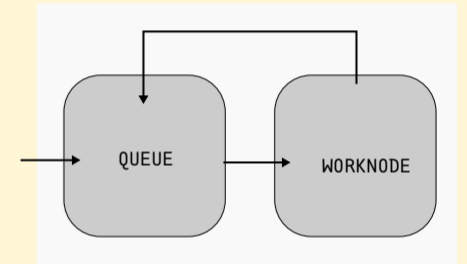
TARGET D1 - A DEVELOPMENT DEMO

INORDER TO PROGRESS FORWARDS WE SET A DEVELOPMENT TARGET for THE FIRST DEMO. IN THIS CASE WE USE THE QUEUE + WORKNODE EXAMPLE. THE QUEUE WILL ALWAYS FEED INTO A WORKNODE; USERS ALWAYS FEED JOBS INTO THE QUEUE -- PRETTY MUCH A PRINTER STYLE RELATIONSHIP.

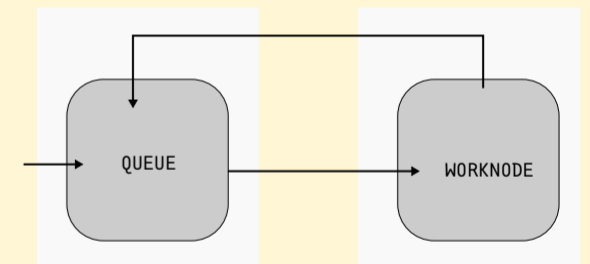


ALL TASKS ARE HANDLED BY A SIMPLE HTTP WEBSITE RUNNING FROM THE QUEUE. THE FOLLOWING SETUPS WILL BE AVAILABLE FROM THE DEMO COMPONENTS :-

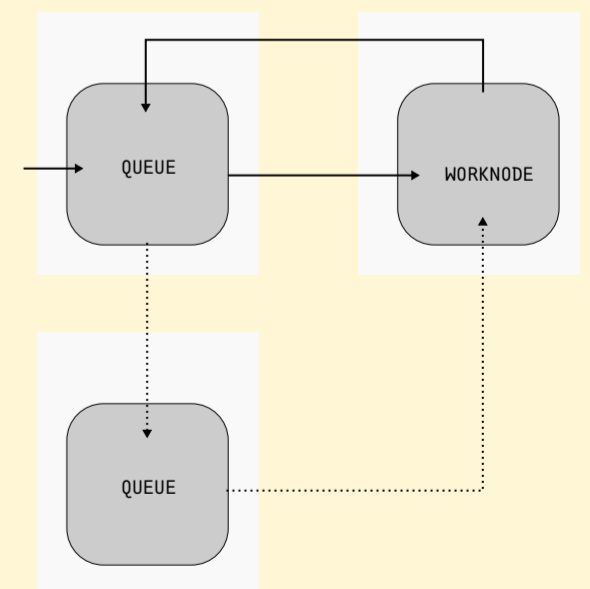
EXAMPLE #1 : RUNNING BOTH COMPONENTS ON A SINGLE HOST



EXAMPLE #2 : RUNNING COMPONENTS ON DIFFERENT HOSTS ON A NETWORK



EXAMPLE #3 : RUNNING COMPONENTS ON DIFFERENT HOSTS ON A NETWORK; WITH A SECOND QUEUE COMPONENT ACTING AS A FAILOVER.

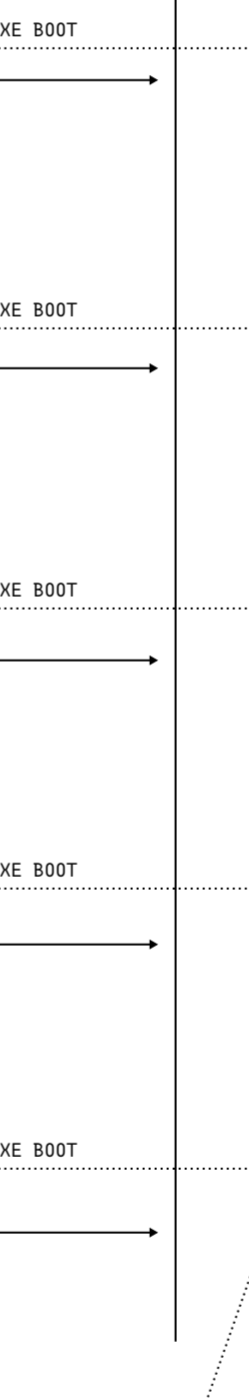


LOTS of HOSTS

WITH SCALE WE NEED TO INTRODUCE ADMINISTRATIVE NODES RUNNING QUEUE, BLACKBOARD, CONFIGURATION, STORAGE and AUDIT SERVICES. DEPENDING ON THE HARDWARE THESE CAN BE RUN ALL ON ONE OR MANY PEICES OF HARDWARE.

IN THIS SETUP A NODE [1-5] JUST CONSISTS OF THE WORKNODE SERVICE; ALL OTHER SERVICES ARE AUTODISCOVERED AND CONFIGURED. THIS ALLOWS SCALE BY SIMPLY SETTING UP A NEW NODE AND INSTALLING WORKNODE SERVICE.

WE CAN IMPROVE THIS FURTHER TO INCREASE QUALITY OF LIFE FOR THE SYSADMIN BY USING PXE BOOT, GETTING RID OF THE NEED TO INSTALL AN OS AND SOFTWARE FOR EACH NODE.



CONTAINS ISO IMAGES of PRECONFIGURED OS + SERVICE SOFTWARE

