Important Queries to Troubleshoot concurrent request / manager issues

Query to check the scheduled concurrent Requests/Programs:

```sql
SELECT cr.request_id,
       DECODE (cp.user_concurrent_program_name,
               'Report Set', 'Report Set:' || cr.description,
               cp.user_concurrent_program_name
       ) NAME, argument_text, cr.resubmit_interval,
       NVL2 (cr.resubmit_interval, 'PERIODICALLY',
             NVL2 (cr.release_class_id, 'ON SPECIFIC DAYS', 'ONCE')
       ) schedule_type, DECODE (NVL2 (cr.resubmit_interval,
                                         'PERIODICALLY', NVL2 (cr.release_class_id, 'ON SPECIFIC DAYS', 'ONCE')
                                         ), 'PERIODICALLY', 'EVERY '
       || cr.resubmit_interval
       || ' '
       || cr.resubmit_interval_unit_code
       || ' FROM '
       || cr.resubmit_interval_type_code
       || ' OF PREV RUN',
       'ONCE', 'AT :'
       || TO_CHAR (cr.requested_start_date, 'DD-MON-RR HH24:MI'),
       'EVERY: ' || fcr.class_info
  ) schedule, fu.user_name, requested_start_date
FROM apps.fnd_concurrent_programs_tl cp,
     apps.fnd_concurrent_requests cr,
     apps.fnd_user fu, apps.fnd_conc_release_classes fcr
WHERE cp.application_id = cr.program_application_id
  AND cp.concurrent_program_id = cr.concurrent_program_id
  AND cr.requested_by = fu.user_id
  AND cr.phase_code = 'P'
  AND cr.requested_start_date > SYSDATE
  AND cp.LANGUAGE = 'US'
  AND fcr.release_class_id(+) = cr.release_class_id
  AND fcr.application_id(+) = cr.release_class_app_id;
```
Query to check the duplicated schedules of the same program with the same arguments

```
SELECT request_id, NAME, argument_text, user_name
FROM (SELECT cr.request_id,
    DECODE (cp.user_concurrent_program_name, 'Report Set', 'Report Set:' || cr.description, cp.user_concurrent_program_name)
    ) NAME, argument_text, fu.user_name
FROM apps.fnd_concurrent_programs_tl cp,
    apps.fnd_concurrent_requests cr,
    apps.fnd_user fu
WHERE cp.application_id = cr.program_application_id
AND cp.concurrent_program_id = cr.concurrent_program_id
AND cr.requested_by = fu.user_id
AND cr.phase_code = 'P'
AND cr.requested_start_date > SYSDATE
AND cp.LANGUAGE = 'US'
AND fu.user_name NOT LIKE 'PPG%') t1
WHERE EXISTS ( SELECT 1
    FROM (SELECT cr.request_id,
        DECODE (cp.user_concurrent_program_name, 'Report Set', 'Report Set:' || cr.description, cp.user_concurrent_program_name)
        ) NAME, argument_text, fu.user_name
    FROM apps.fnd_concurrent_programs_tl cp,
    apps.fnd_concurrent_requests cr,
    apps.fnd_user fu
    WHERE cp.application_id = cr.program_application_id
    AND cp.concurrent_program_id = cr.concurrent_program_id
    AND cr.requested_by = fu.user_id
    AND cr.phase_code = 'P'
    AND cr.requested_start_date > SYSDATE
    AND cp.LANGUAGE = 'US'
    AND fu.user_name NOT LIKE 'PPG%') t2
WHERE t1.NAME = t2.NAME AND t1.argument_text = t2.argument_text
AND t1.user_name = t2.user_name
GROUP BY NAME, argument_text, user_name
HAVING COUNT(*) > 1
ORDER BY user_name, NAME
```
Query to check average pending time per request:

*Please Note:* Average pending time for a request is calculated like below:
("Highest of Requested_start_date or Date_submitted" - Actual_start_date) / Total requests

A Request can be in *Pending* state for variety of reasons like conflict with other requests, improperly tuned managers (sleep seconds / cache size / number of managers etc)

We can schedule this script to gather data regularly for historical analysis as we normally purge the concurrent requests regularly.

```
SELECT TO_CHAR (actual_start_date, 'DD-MON-YYYY') DAY,
concurrent_queue_name,
(SUM ( ( actual_start_date - (CASE
WHEN requested_start_date > request_date
THEN requested_start_date
ELSE request_date
END
)
)
* 24
* 60
* 60
) )
) / COUNT (*) "Wait_Time_per_Req_in_Secs"
FROM apps.fnd_concurrent_requests cr,
apps.fnd_concurrent_processes fcp,
apps.fnd_concurrent_queues fcq
WHERE cr.phase_code = 'C'
AND cr.actual_start_date IS NOT NULL
AND cr.requested_start_date IS NOT NULL
AND cr.controlling_manager = fcp.concurrent_process_id
AND fcp.queue_application_id = fcq.application_id
AND fcp.concurrent_queue_id = fcq.concurrent_queue_id
GROUP BY TO_CHAR (actual_start_date, 'DD-MON-YYYY'),
concurrent_queue_name
ORDER BY 2
```
➢ Query to checking which manager is going to execute a program:

```sql
SELECT user_concurrent_program_name, user_concurrent_queue_name
FROM apps.fnd_concurrent_programs_tl cp,
     apps.fnd_concurrent_queue_content cqc,
     apps.fnd_concurrent_queues_tl cq
WHERE cqc.type_application_id(+) = cp.application_id
AND cqc.type_id(+) = cp.concurrent_program_id
AND cqc.type_code(+) = 'P'
AND cqc.include_flag(+) = 'I'
AND cp.LANGUAGE = 'US'
AND cp.user_concurrent_program_name =
    '&USER_CONCURRENT_PROGRAM_NAME' AND NVL (cqc.concurrent_queue_id, 0)
    = cq.concurrent_queue_id
AND NVL (cqc.queue_application_id, 0) = cq.application_id
AND cq.LANGUAGE = 'US'
```

➢ Query to see all the pending / Running requests per each manager wise :

```sql
SELECT request_id, phase_code, status_code, user_name,
       user_concurrent_queue_name
FROM apps.fnd_concurrent_worker_requests cwr,
     apps.fnd_concurrent_queues_tl cq,
     apps.fnd_user fu
WHERE (cwr.phase_code = 'P' OR cwr.phase_code = 'R')
AND cwr.hold_flag != 'Y'
AND cwr.requested_start_date <= SYSDATE
AND cwr.concurrent_queue_id = cq.concurrent_queue_id
AND cwr.queue_application_id = cq.application_id
AND cq.LANGUAGE = 'US'
AND cwr.requested_by = fu.user_id
ORDER BY 5
```
Query to checking the incompatibilities between the programs:

```
SELECT a2.application_name, a1.user_concurrent_program_name,
DECODE (running_type,
  'P', 'Program', 'S', 'Request set', 'UNKNOWN') "Type",
  b2.application_name "Incompatible App",
  b1.user_concurrent_program_name "Incompatible_Prog",
  b2.application_name "Incompatible App",
  DECODE (to_run_type, 'P', 'Program', 'S', 'Request set', 'UNKNOWN')
  incompatible_type FROM apps.fnd_concurrent_program_serial cps,
  apps.fnd_concurrent_programs_tl a1, apps.fnd_concurrent_programs_tl b1,
  apps.fnd_application_tl a2, apps.fnd_application_tl b2
WHERE a1.application_id = cps.running_application_id
  AND a1.concurrent_program_id = cps.running_concurrent_program_id
  AND a2.application_id = cps.running_application_id
  AND b1.application_id = cps.to_run_application_id
  AND b1.concurrent_program_id = cps.to_run_concurrent_program_id
  AND b2.application_id = cps.to_run_application_id
  AND a1.language = 'US' AND a2.language = 'US'
  AND b1.language = 'US' AND b2.language = 'US'
```