

Workload Capping for DB2 Web Query for i

The workload capping portion of the DB2 Web Query product limits the CPU resources that the product can use. This capping process is based on the licenses installed for the 5733WQX product, specifically the licenses for the *BASE (5050), Express (5101) and Standard (5102) features.

- If the product is in its trial period i.e. without any valid licenses installed, the product will be limited to use no more than one core of CPU resources.
- Once licenses are installed, the core limit specified on the licenses is used. For example, if a license for two cores of the Standard license (5102) is installed, the product will adjust to set its upper limit to no more than two cores of CPU resource. Note that the *BASE (5050) license should always be installed prior to installing either the Standard or Express license.

Under normal circumstances, DB2 Web Query will set the cap to allow the product to use all available licensed cores on a single partition. However, sometimes it is desirable to utilize, or 'share', a license across two or more partitions on a given system. This is called license sharing. The product will honor this license sharing in three different ways:

1. Capped Partitions. If two or more partitions are defined to be capped partitions, and the sum of the capped partitions is less than or equal to the number of licensed cores of DB2 Web Query, then the same DB2 Web Query license(s) can be applied on those partitions and DB2 Web Query can run on all those partitions.
2. User Specified capping. The data area QWQREPOS/QWQWLCGRP can be created to communicate to the product how many cores to limit itself to on a given partition. The data area, created as a TYPE(*DEC) LEN(3), can be set to the number of cores that the partition should use. Note: Cores must be specified in the data area as whole (integer) numbers. For example:

Limit the number of cores of DB2 Web Query on a partition to one core:

```
ENDWEBQRY  
CRTDTAARA DTAARA(QWQREPOS/QWQWLCGRP) TYPE(*DEC) LEN(3) VALUE(1)  
STRWEBQRY
```

When DB2 Web Query is restarted, the product will be limited to one core's worth of CPU resource. If the license was for more than one core, then potentially the DB2 Web Query license(s) can be applied to another partition.

3. Capped Partitions in conjunction with User Specified capping. Both types of partition capping can be used together to share the licensing. For example, partitionA is a capped partition with a cap of .5. partitionB is a larger partition but has the QWQREPOS/QWQWLCGRP data area set to 1. These two partitions can share a two core license, with .5 cores of the license potentially available for another capped partition.

Note: whenever any changes to licensing or capping are made, DB2 Web Query should be ended and restarted to pick up the change. This can be accomplished with the ENDWEBQRY/STRWEBQRY commands, the WRKWEBQRY command, ending and restarting the QWEBQRY21 subsystem, or an IPL of the partition.