

## A ERRATA

### A.1 Publication 3

In Publication 3 page 283 equation (13), the expression for  $\beta(2, i)$  overestimates the amount of capacity used by the UDP flows in the same priority level. Instead of  $C(i) - n(1, i)t(1, i - 1)$ , we should have  $C(i) - n(1, i)\nu(1)$ , to take into account the case where  $t(1, i) < \nu(1) < t(i, i - 1)$ . However, in all our numerical examples we consider the case  $\nu(1) = t(1, i - 1)$ , and there equation (13), as given in Publication 3 holds.

Equation (13) giving the bandwidth shares in the case of two buffers with dependent discarding and per flow marking should be

$$\begin{cases} \beta(1, i) = \min\left\{\frac{C(i)}{n(1, i)}, t(1, i - 1), \nu(1)\right\}, \\ \beta(2, i) = \min\left\{\max\left\{\frac{C(i) - n(1, i)\nu(1)}{n(2, i)}, 0\right\}, t(2, i - 1)\right\}. \end{cases}$$

### A.2 Publication 4

In Publication 4 section 4, the load of the simulation for distribution scenario D1 is higher than intended. The maximum flow size for the long flows should be 1500 packets. In the TCL script for the ns2 simulation this should have been given as 1500.0 instead of 1500. Due to this mistake, there were larger flows generated and the corresponding load was also higher. The simulations for distribution scenario D1 have a load of 1.07, thus the simulations represent an overload case. However, the results are still valid and represent a scenario for a heavy tailed flow size distribution. The results show how age based scheduling mechanisms are able to cope better than DropTail in an overload situation.

The results for distribution scenario D2 are as given in the paper.

### A.3 Publication 5

In Publication 5, in section 1 second column on page 97 and in section 3.1 first column on page 102, we say that it is proven in [RSY90] that FB minimizes the mean delay when the size distribution is of type New Worse than Used in Expectation (NWUE), but the proof in [RSY90] is for job size distributions of type Increasing Mean Residual Life (IMRL).

The sentences should read:

- Righter et al. [6] show that FB minimizes the mean delay when the job size distribution is of type Increasing Mean Residual Life-Time (IMRL), which is a weaker condition than DHR.
- Righter et al. [6] prove that  $E[T^{\pi_1}] \leq E[T^{\pi_2}]$  when the service time distribution is of type IMRL.

However, there seems to be a subtle deficiency in [RSY90] regarding the proof of FB's optimality. Instead of the truncated unfinished work  $U_x^\pi(t)$ , Richter et al. [RSY90] consider the corresponding untruncated random variable  $V_x^\pi$ . Therefore, while FB minimizes  $U_x^\pi(t)$ , see Proposition 5 in Publication 5, FB does not minimize  $V_x^\pi(t)$  nor  $\bar{V}_x^\pi$ . See Publication 5, section 3 for more detail.