News on Producers and Consumers

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In this report we describe a variant of the well-known producer/consumer constraint occurring in process-based scheduling problems. For this type of situation the original producer/consumer model with cumulative does not provide satisfactory propagation. We discuss several other constraint models, either based on cumulative or on diffn and show some improvements on a typical example. Adding some redundant implications further improves the reasoning, so that the simple example problem is solved by propagation only. The resulting model with diffn and implications can be useful for a number of other producer/consumer situations, if an initial order of the tasks can be given.