The Implementation of Global Constraints in B-Prolog

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In this talk, I will present the techniques used in the implementation of several global constraints in B-Prolog, including `element`, `all_distinct`, `circuit`, and `cumulative`. Most of the techniques are well-known but some are novel such as use of the `dom` event in describing propagators and use of channeling constraints to enhance the pruning power. I will also talk about our recent effort in parallelizing propagators for the `all_distict` constraint.