

Response to reviewer C:

The authors would like to thank Reviewer C for the valuable comments and contribution to improve the paper. Below our response to the comments / suggestions made by Reviewer C:

1. p.1 – Use “resources” iso “resource” in the second line of the **Abstract**;
Thank you, we have made the change.
2. p.3 – The $r \in \mathcal{R}$ may be omitted from the second constraint (marked **(3)**);
Thank you, we have made the change.
3. p.3 – There are two consecutive full stops (“.”) in the third last paragraph;
Thank you, we have made the change.
4. p.5 – There is no accent (“”) in the subscript of the union in the equation in the second paragraph;
Thank you, we have made the change.
5. p.6 – I think the simulation computer has four cores with eight threads rather than eight cores (confirm please) – also, would it not make sense to include the speeds of the CPU, RAM and HDD?

Thank you, we have made the change. We could, however, not obtain information regarding the speed of the RAM or the HDD.

6. p.8 – In **Table 2**, why are all the *Time (s)* entries zero (“0”) when the number of instances that solved to optimality is zero? Does it mean that the other *Time (s)* entries are the averages for the percentage of instances that solved to optimality? If this is true, the text seems to omit this fact;

Thank you. This is clearly incorrect. We have used the characters “---” for the instances where no optimal solutions could be found and, consequently, where no run time could be reported.

7. p.11 – There is a double “the” as well as a double “instance” in the second paragraph.
Thank you, we have made the change.

The list of proposed adjustments to **Algorithm 1**:

1. Use full stops consistently at end of lines;
Thank you, we have made the change.
2. The innermost *for-loop* should use a different index as this is inside a loop already using j as index – alternatively, this loop can be rewritten in the same format as the union of sets in the third line;

We would like to point out that the innermost *for-loop*, referred to by the reviewer, is not inside another loop using j as an index. There are, however, two consecutive loops over the index j , but both of these are within the outer loop indexed by i

3. I suggest setting $\mathcal{F} = i+$ from the start as this will always be the first node to be added (please double check);

Thank you for the suggestion. This is, however, implied by the third instruction.

4. Also, I suggest setting $s_i = s_{i^*}$ before commencing with the *while-loop*;
Thank you for the suggestion.

5. The iterations for the first *for-loop* may be reduced by using $i \in \mathcal{A} \setminus \mathcal{F}$ iso $i \in \mathcal{A}$;

Thank you for the suggestion. This is in fact implemented in our code, but we neglected to show this in the outline of the algorithm .

6. It is not advisable to update the set \mathcal{A} while iterating through its elements – it will be better to define a temporary update set inside the *for-loop* (e.g. \mathcal{B}), adding new elements to it (e.g. $\mathcal{B} = \mathcal{B} \cup \mathcal{S}(i)$), and adding all elements in the temporary update set to \mathcal{A} after the *for-loop* has finished, just before updating the constraints (e.g. $\mathcal{A}' = \mathcal{A} \cup \mathcal{B}$).

Thank you for the suggestion. Although the suggested approach was followed in our implementation for the purpose of preventing coding errors, we decided to only use the set \mathcal{A}' to improve readability of the paper. We have updated the paper, however, to reflect the use of the temporary set \mathcal{B} as suggested by the reviewer.

For the purpose of improving our paper, we have taken the initiative to add another table as part of the results discussion. Table 5 was added to demonstrate the effectiveness of the proposed RFX when the segment J60_L are further refined to represent problem instances having both a low average DR and a low average RS. This makes it directly comparable to the BL data set. The J60_L has a lower DR and a lower RS value compared to the BL data set.