Rules and Rule Sets

Rule Sets are used within Placement Manager to assist with Student placement allocation and suitability ranking. When the Rule Set is run within Placement Manager, every Student is compared to every Placement Offer, and a score is calculated for how well they match based on the rules defined within the selected Rule Set.

Placement Manager displays the best matches of Placement Offers to Students at the top of the list. In this way, running Rule Sets can be used to allocate Students against their most appropriate Placements.

Rule Sets:

A Rule Set is run from any of the **Placement Allocation tabs** in **Placement Manager**:

To run a Rule Set from within Placement Manager:

Navigate to **Placement > Placement Manager**

1. In the filter section select the appropriate **Year**, **Discipline** and **Allocation Group**.
2. Select the appropriate Placement Allocation tab
    - Student > Offer
    - Offer > Student
    - Best Fit
3. Select the appropriate **Rule Set** from the **Rule Set drop-down** and click **Run Trial Match**.

4. The Run Trial Match window displays

5. Click the **Close** button to display Students with their most appropriate Placement Offers and calculated scores.

Note: Each time the Run Trial Match button is clicked, scores are recalculated for how well each Student matches a Placement Offer. The Placement Manager re-orders the list based on the Student's newly calculated most appropriate Offer.

Understanding Rule Sets

A Rule Set is simply a collection of rules. Rules are not standalone and can only be run as part of a Rule Set. An example Rule Set is outlined in the image below.
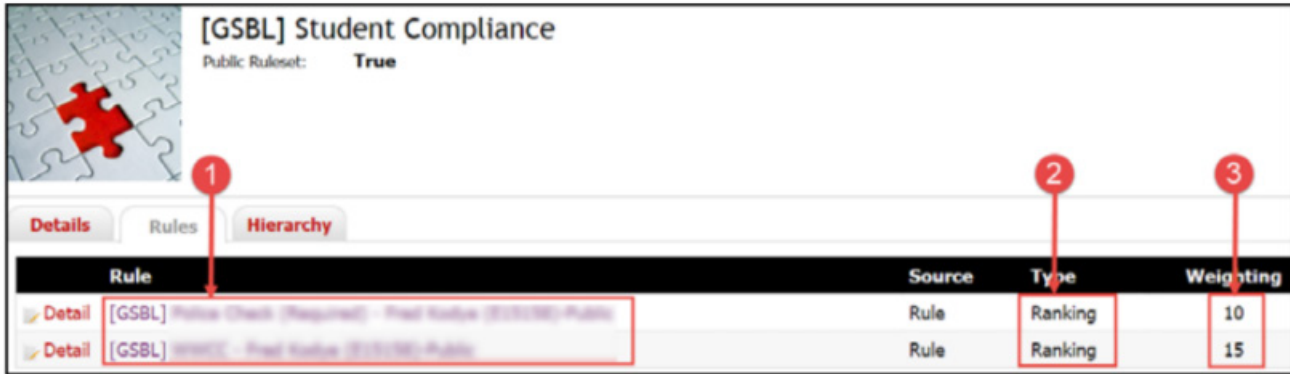
The image above displays the Rules tab:

1. The name of the rules that are contained in the Rule Set. Clicking on the name displays the Rule details page.
2. The Type of the rule, either Criteria or Ranking
3. The Weighting score attributed to the rule. Weighting is only defined for ranking rules.

Clicking the **Detail** link of a Rule allows you to **edit** the **type** or **weighting** attributed to the Rule.

If a **criteria rule** is used and the specified condition is not satisfied, no further rules are processed. In these circumstances, no score is returned and the Student is not matched to the Placement. This is not the same as a '0' value.

If a **ranking rule** is used and the **specified condition** is not satisfied, a score of '0' is returned. If the condition is satisfied, the specified weighting is returned. If multiple ranking rules are satisfied, the weighting of all satisfied rules are added together. A total score is calculated for how well each Student matches to each Placement Offer.

To assist in understanding Rule Sets, we will explain an example Rule Set and the rules it contains.

Example Rule Set
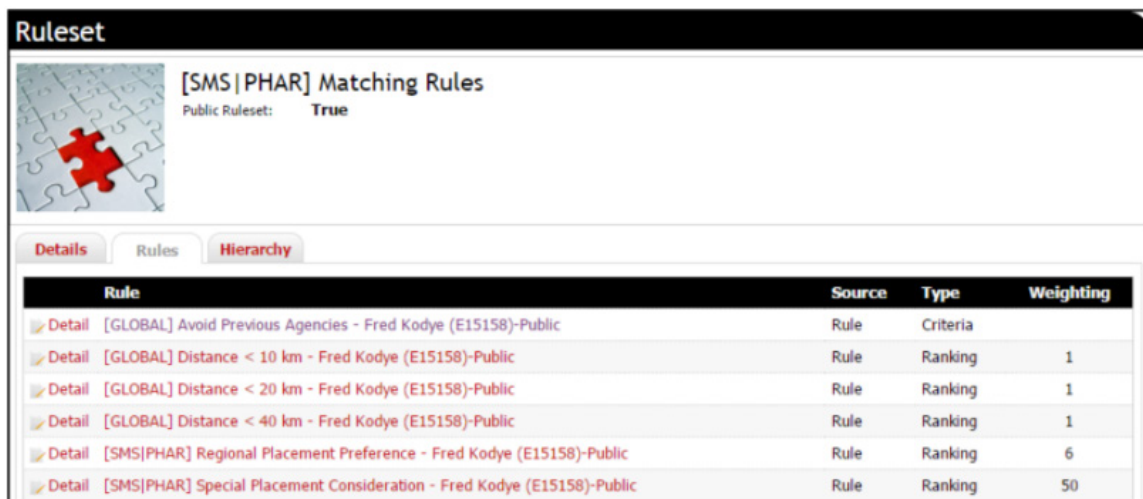
The example Rule Set displayed in the image is made up of 6 rules (1 criteria rule and 5 ranking rules).

To understand how the Rule Set works we will look at each individual rule.

Rule 1: Avoid Previous Agencies

What is the name of your Rule?

[GLOBAL] Avoid Previous Agencies

Public:
☑

Select Rule Base

◉ Pre-Loaded Rule: Student (Prior Placements) ▾

○ Extended Attribute:
No Extended Attribute Selected (XA)

Select XA

Select Rule Operator

How is it being compared?
○ Match. All selections in second list, selected in first list
◉ Avoid. All selections in second list, selected in first list

Select Comparison Element

◉ Agency

Within the InPlace System, a number of commonly used rules have been pre-defined, one of these is Student (Prior Placements) used in the first rule of the Example Rule Set.

Rule 1 is a **Criteria rule**, which checks to see if a Student has had a prior placement at the Agency. If the Student has had a prior placement, the rule fails and will not continue on to the ranking rules, and no score is returned. If the Student has not been previously placed at the Agency, the rule passes and the Rule Set continues on to rule 2.

Rules 2-4: Distance < 10km, Distance < 20km, Distance < 40km

What is the name of your Rule?

[GLOBAL] Distance < 10 km

Public:
☑

Select Rule Base

◉ Pre-Loaded Rule: Location (Crow Flies) ▾

○ Extended Attribute:
No Extended Attribute Selected (XA)

Select XA

Select Rule Operator

How is it being compared?
○ Equal To
○ Not Equal To
○ Greater Than
○ Less Than
○ Greater Than or Equal To
◉ Less Than or Equal To

Select Comparison Element

◉ Literal Value: 10

These **ranking rules** make use of the **Pre-Loaded Rule of Location** (Crow Flies) which calculates the distance (in Kms) between the Student's home address and the Agency's business address.

If the Student's address is less than or equal to 10kms from the Agency's address, a score of 1 is returned. If the Student lives more than 10kms away from the Agency, a score of 0 is returned and the Rule Set continues on to rules 3 and 4. Taking into account all three distance rules, Students who live closer receive more points than Students who live further away from the Agency address.

Student's Distance from Agency	Cumulative Score for rules 2-4
5km	3
15km	2
25km	1
50km	0

Rule 5: Regional Placement Preference

This **ranking rule** does not use a Pre-Loaded Rule, instead it **validates** that the **Student has selected** a **Regional Placement Preference** that matches the Agency Region. If the region matches, a score of 6 is returned, otherwise 0 is returned. The Rule Set continues on to rule 6.

Rule 6: Special Placement Consideration

This rule **validates** that the S**tudent has been approved for Special Consideration**, which is recorded against the Placement Consideration flag. A large number like 50 is used as a red flag to put the Placement Offer at the top of the list for first consideration.

This is the final rule of the Rule Set. All weighting scores from all 5 of the ranking rules which are satisfied will be added together to give a total score.

What is the name of your Rule?

[SMS|PHAR] Special Placement Consideration

Public:
☑

Select Rule Base

○ Pre-Loaded Rule:

◉ Extended Attribute: Detail

**Discipline - Pharmacy
Relationship: Student
Label: Placement Consideration**

Select XA

Select Rule Operator

How is it being compared?
◉ Equal To
○ Not Equal To

Select Comparison Element

◉ Literal Value: ☑

○ Extended Attribute:
No Extended Attribute Selected (XA)

Select XA

Creating a new Rule Set

To create a new Rule Set, you must first create the individual rules. You can also create a Rule Set that uses rules that have already been set up

To create a new rule:

1. Select Rule from the Placement menu
2. Click the + Add a new item link
3. Enter an appropriate name into the field: 'What is the name of your rule?'
4. Check the Public flag
5. Select the Rule Base (Either a value from the Pre-Loaded Rule drop down,Or an Extended Attribute, by clicking the Select XA button)
6. Select the appropriate Rule Operator
7. Enter an appropriate Select Comparison Element
8. Click Save
9. Repeat these steps for each new rule that needs to be created.

To create a new Rule Set:

1. Select **Rule Set** from the **Placement menu**
2. Click the **+ Add a new item** link
3. Enter an appropriate **Description** and click **Save**
4. Click the **Rules tab**
5. Click the **Add Rule** link
6. Select the appropriate rule from the **Rule drop-down**
7. Select the appropriate **rule type** from the **Type** drop-down
8. For ranking rules, enter a Weighting value
9. Click **Save**
10. Repeat for each rule you wish to add to the Rule Set

Note: You can use any whole numbers for the weighting value. You should give more points to the rules that you consider more important. The numbers selected for the weighting are arbitrary, but are only important in comparison to each other.

For further assistance, please contact your school's WIL team or visit InPlace Support Online Help or contact the InPlace Business Support Team at inplace.support@rmit.edu.au