

## Business Rules in JavaScript from Symbolic Expressions

The Rules can be authored as a Symbolic Expression using the SLANG language ( available @ <http://slangfordotnet.codeplex.com> ) and the JavaScript language backend of the Compiler will be used to generate equivalent JSON .

The Excel Spread sheet will contain three worksheets viz

- A) Variables ( Environment )
- B) RuleText
- C) ProgramToRule mapping

As an Example , A Eligibility rule based on some Variables are given below

- A) Variables ( Environment )

| VariableName   | Type    | Remarks              | DefaultValue |
|----------------|---------|----------------------|--------------|
| TA             | Numeric | Travelling Allowance | 0            |
| DA             | Numeric | Dearness Allowance   | 0            |
| BASIC          | Numeric | Basic Salary         | 0            |
| HRA_DEDUCTION  | Numeric | HRA allowance        | 0            |
| OTHER_DEDUCTIO | Numeric | Other Deduction      | 0            |
| N              | STRING  | "F" or "M"           | M            |
| Handicapped    | Boolean | TRUE Or FALSE        | TRUE         |

- B) RuleText Sheet contains

| RuleName | RuleText  | Remarks |
|----------|---|---------|
| R1       | <div>Numeric Temp;<br/>Numeric Temp1;<br/><br/>Temp = ( TA + DA + BASIC );<br/><br/>Temp1 = ( HRA_DEDUCTION +</div> |         |

|    |  |  |
|----|--|--|
|    | OTHER_DEDUCTION );<br><br>Temp1 = Temp - Temp1;<br><br>return Temp1 < 10000; |  |
| R2 | return SEX == "F";   |  |
| R3 | return SEX == "M" && HandiCapped == TRUE;                                    |  |

C) The ProgramToRuleMappings contain

| ProgramName | Expression | Remarks                               |
|-------------|------------|---------------------------------------|
| P1          | R1 Xor R2  | Only R1 or R2 should be true not both |
| P2          | R1 OR R3   | R1 or R3 can be true                  |

The Spreadsheet can be used as a input to generate the JSON.