1 Background

During our studies at Hochschule Darmstadt we are learning to use Rational Developer for i V9.0. As we are just starting with RDi, we made some experiences, which might be interesting to get shared. Out of that experience we want to raise the following Request For Enhancement (RFE).

1.1 SS2014-RFE03-GehDe-SchKi

The RFE is defined by Denis Gehde, Kirsten Schwarz

Id	Obj	Type	Description
03	CLP	Suggestion	Handling tiny mistakes on commands while pressing F4 in CLP Programs.

Company: Hochschule Darmstadt

Headline: Handling tiny mistakes on commands while pressing F4 in CLP Programs.

Priority: • Medium - Lack of the RFE functionality is a minor road block to deployment/adoption

Brand: Rational

Product family: Design & development

Product: Developer for Power Systems

Component: RPG/COBOL Development Tools

Operating system: IBM i

PMR: -

Customer Tracking Id: SS2014-03

Description: (see 1.1.1)

Use Case: (see 1.1.2)

Business Justification: (see 1.1.3)

Attachment: This document

1.1.1 Description

After using content assist (F4) on commands for CL in Rational we experienced various problems concerning missing blanks. The IDE should be capable of handling mistakes up to a certain range, e.g. detecting and filling missing blanks/brackets, like in the picture below.

```
000100 PGM
000200 INCLUDE  SRCMBR(ERRHDLFCL)
000300 ADDLIBLE  LIB(HDAGEHDE)
000400 ADDENVVAR  ENVVAR(JAVA_HOME)  +
000500 VALUE('/QOOPENSYS/QIBM/PRODDATA/JAVAVM/JDK60/32BIT')
000600 SBMJOB      CMD(QSH +
000700             CMD('/HDAGEHDE/APACHE/APACHE-TOMCAT-6.0.41/BIN/SHUTDOWN.SH')) +
000800             JOB(HDAGEHDETE  JOBQ(HDAGEHDETC)  CPYENVVAR(*YES)  +
000900             ALWMLTTHD(*YES)
001000 ENDSBS  SBS(HDAGEHDESB)
001100 INCLUDE  SRCMBR(ERRHDL)
001200 ENDPGM
```

Abbildung 1: Tiny mistake - Missing Bracket

1.1.2 Use Case

1. Using a specific command in combination with content assist (F4)

2. Input parameters for that command

3. Validate user input on the fly with visual feedback for failures

4. IDE displays a red squigly underline on typing errors

1.1.3 Business Justification

Ensures enhanced user-experience and provides a more fluent work environment due to reduced compile cycles on misleading compiler messages.

1.1.4 Comparison to alternative solutions

In the Picture below there is a bracket in the if-clause missing and the commands 'cout' and 'endl' are unknown in this context and syntax. The IDE shows this by red lines, indicating an error. By hovering over the red line a tooltop shows if the IDE got a possible solution.

```
int N=2;
if (N = 2)
{
    cout << "Hello World"<< endl;

else
    return 0;
```

Abbildung 2: Netbans IDE Error-Highlighting for C++

The Picture below is showing an example from standard Eclipse for Java development:

Abbildung 3: Eclipse IDE Error-Highlighting for Java

1.1.5 Detailed substantiation and suggestion

Our suggestion is a use of the build-in Eclipse feature for RDi and mark the typing mistakes and autocorrect them.

1.1.6 Analysis of existing and related RFEs

To concentrate the focus of voting we did some brief analysis, if there are related RFE's. The following list is providing a short overview, where we provide some suggestion, if the match is good (1) or not (6).

Id	headline / match	Status	Date created
11211	Identify undefined RPGLE variables/procedures in editor	Uncommitted Candidate	2011-06-07 01:02 PM (ET)
4:	Different intelligence on CMD level handling in CLP is needed.		