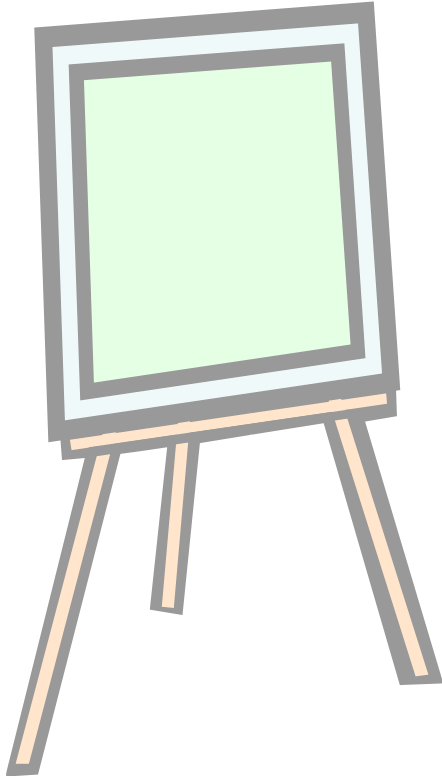


Desenvolvimento de uma Solução de Integração de Aplicações para Automatizar Reservas de Viagem

Edinaldo Gaspar da Silva
Bolsista PIBIC/CNPq

Orientadora:
Dra. Frabricia Roos Frantz

Roteiro

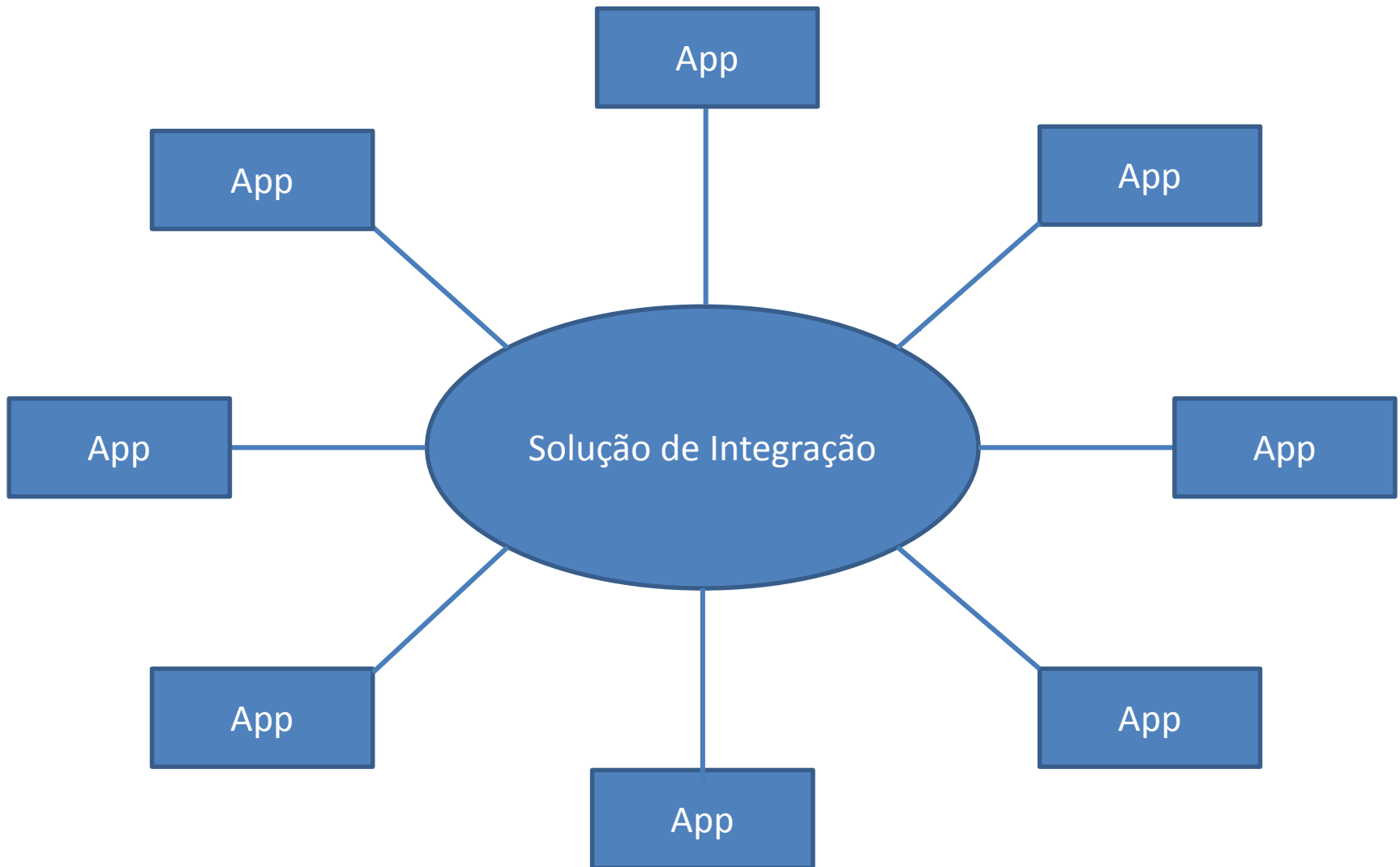


- ❖ Integração de aplicações
- ❖ Guaraná
- ❖ Caso de Estudo
- ❖ Implementação

Integração de Aplicações



Integração de Aplicações



- Guaraná DSL
- Guaraná Cloud
- Guaraná ESB



Guaraná Cloud

The screenshot displays the Guaraná Cloud workflow editor. On the left, there is a sidebar with three sections: 'Router' (containing icons for different routing types), 'Modifier' (containing icons for data manipulation), and 'Transformer' (containing icons for data transformation). The main workspace shows a workflow diagram starting with a folder icon, followed by a green router icon, a green modifier icon, and a red router icon. This red router icon branches into three paths, each leading to a folder icon, and a fourth path leading to an SMTP icon. On the right, a 'Task properties' panel is visible, showing the name 'Filter14' and a pass condition: `/travel/ticket/id!='' | travel/ac`. At the bottom, a toolbar contains various icons for actions like Debug, Save, Exit, Cut, Copy, Paste, Delete, Undo, Redo, Zoom in, Zoom out, Scale, Fit, Capture, Print, and Help. A status bar at the bottom left contains an information icon and the text: 'To initialize debugging all you have to do is click on 'Execute'. You'll have to wait a few seconds until the solution execution ends.'

Guaraná ESB

```
*C:\Users\EdinaldoGaspar\workspace\standalone_guarana\bin\travel_code.xml - Notepad++
Arquivo  Editar  Localizar  Visualizar  Formatar  Linguagem  Configurações  Macro  Executar  Plugins  Janela  ?
travel_code.xml  travel.xml  travel.xml  travel.xml

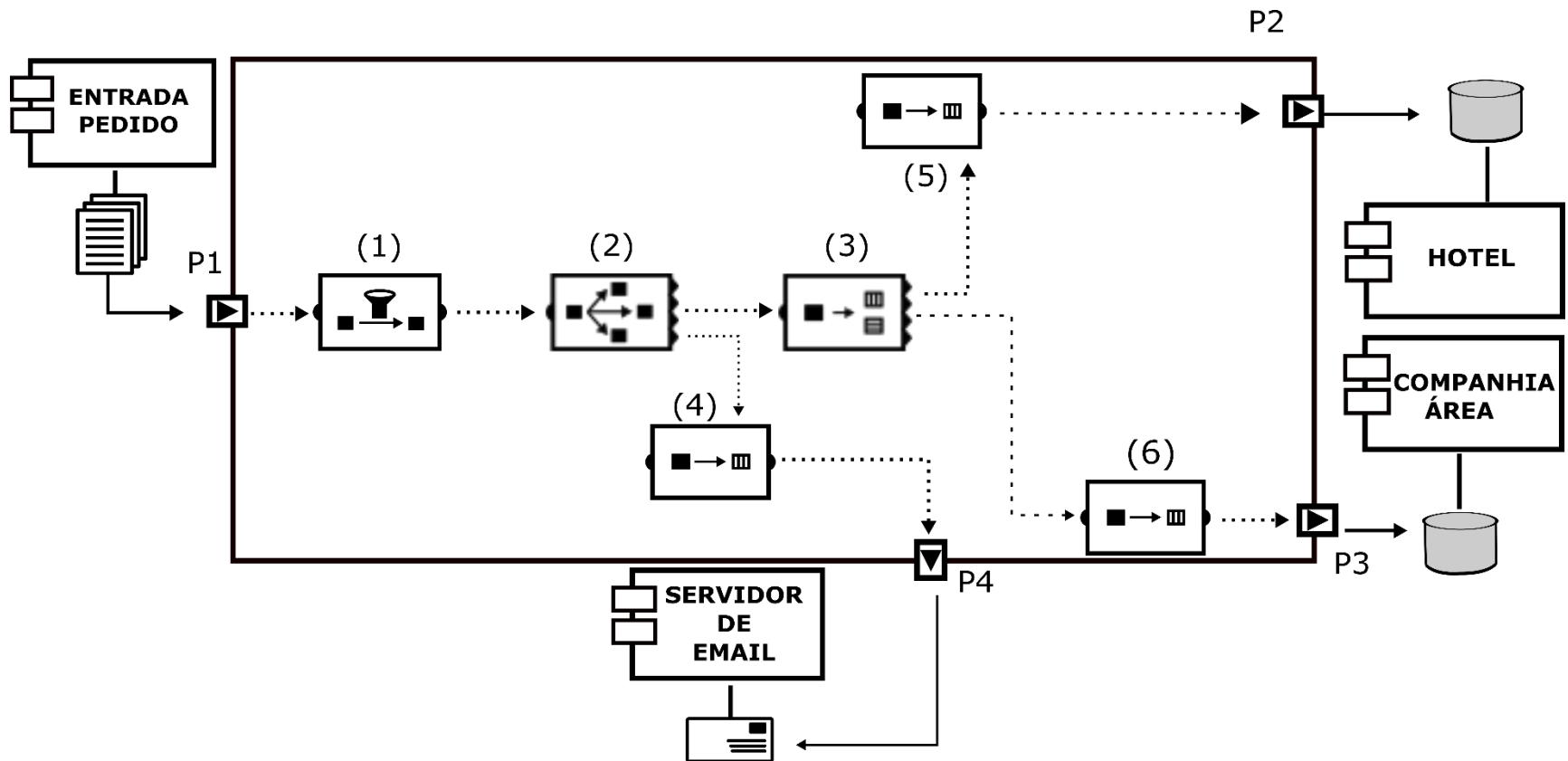
1  <?xml version="1.0" encoding="UTF-8"?>
2  <guarana-context
3  xmlns="http://www.i2factory.com/schema/guarana"
4  xmlns:spring="http://www.springframework.org/schema/beans"
5  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
6  id="guarana-context" xsi:schemaLocation="
7  http://www.i2factory.com/schema/guarana
8  http://www.i2factory.com/schema/guarana/guarana-spring.xsd"
9
10 >
11
12 <config>
13
14   <engine id= "travelModel" pool-size= "10"/>
15
16 </config>
17
18 <pipelines>
19
20   <entry-pipeline id= "EntryPipeline">
21     <object-to-xml id= "ObjetToXml"/>
22
23   </entry-pipeline>
24
25
26   <exit-pipeline id= "ExitPipeLine1">
27     <xml-to-object id= "testXmlToObject"/>
28   </exit-pipeline>
29   <exit-pipeline id="ExitPipeLine2">
30     <xml-to-object id= "testXmlToObject"/>
31   </exit-pipeline>
32
33 </pipelines>
34
35 <ports>
36   <entry-port id= "EntryPortMessage"
37     uri="folder:///D:/Travel/?include=*.xml"
38     engine="travelModel" entry-pipeline="EntryPipeline"
39     task="filter"/>
40
41
length : 2449  lines : 103  Ln : 21  Col : 42  Sel : 0 | 0  Dos/Windows  UTF-8 w/o BOM  INS
```

Caso de estudo

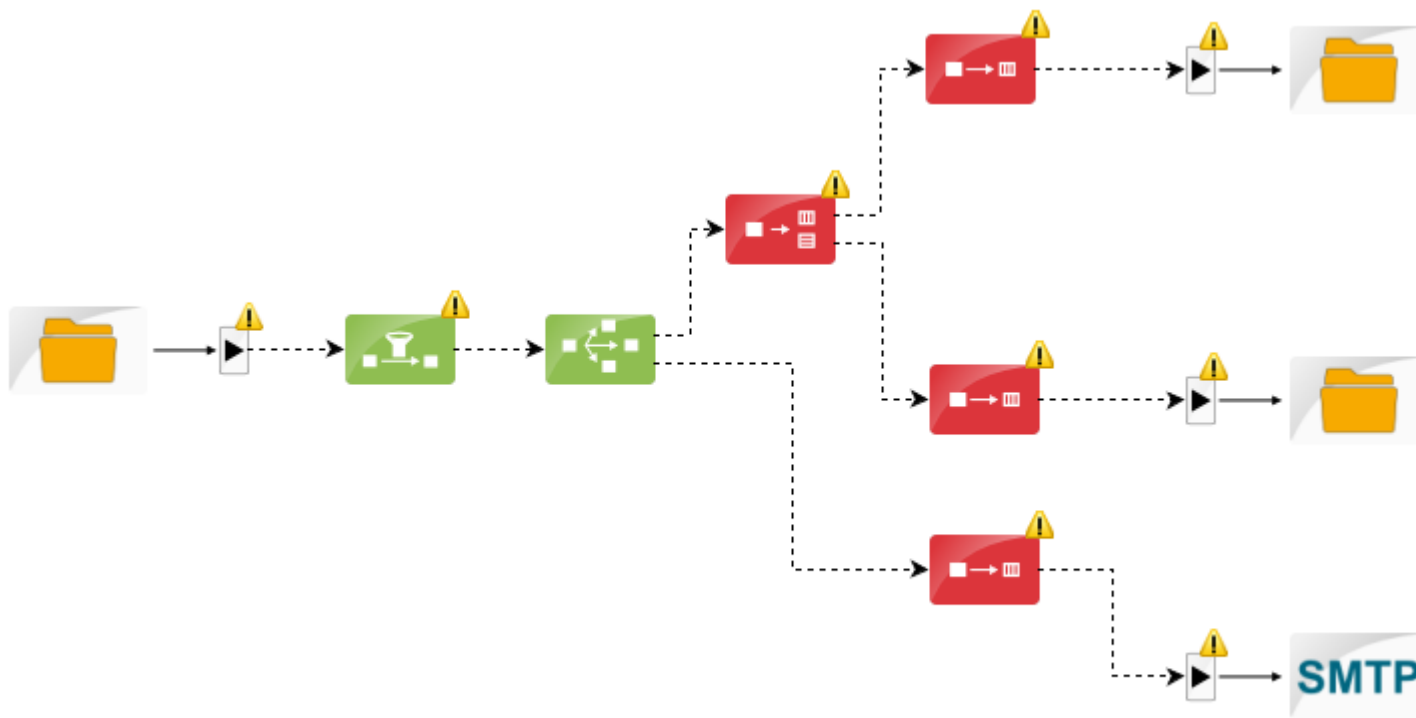
- O problema de integração
- Modelo desenvolvido a partir do Guaraná DSL



Modelo com o DSL



Modelo no Guaraná Cloud



Mensagem

```
<travel>
  <request>
    <ticket>
      <id>01</id>
      <destination>Porto-Alegre</destination>
      <origin>Ijuí</origin>
      <time>20:00</time>
      <type>flight</type>
    </ticket>
    <accommodation>
      <id>02</id>
      <name>City-Hotel</name>
      <fone-number>5133333333</fone-number>
      <adress>Rua dos Andradas</adress>
      <room>121</room>
      <type>room</type>
    </accommodation>
  </request>
</travel>
```

Implementação

- Código de implementação da porta P1

```
<entry-port
  id = "EntryPointMessage"
  uri = "folder:///D:/Travel/?include=*.xml"
  engine = "travelModel"
  entry-pipeline = "EntryPipeline"
  task = "filter"
/>
```

Implementação

- Código de implementação da tarefa “Filter”

```
<filter
id = "filter"
expression = "/travel/request/ticket/[id!=""] |
travel/request/acommodation/[id!=""]"
task = "replicator"
/>
```

Obrigado por sua atenção!

Contato:

Edinaldo Gaspar da Silva

edinaldogaspar@outlook.com

www.gca.unijui.edu.br/egaspar

www.gca.unijui.edu.br



Applied
Computing
Research Group