

IMP: InputLink Manipulation Plug-in

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Motivation and Goals

- Input link manipulation is tedious
- “An 80% solution”
 - Specify IL structure or supply VS Datamap
 - Tool generates SML-level code
 - Tweak auto-generated code to suit environment

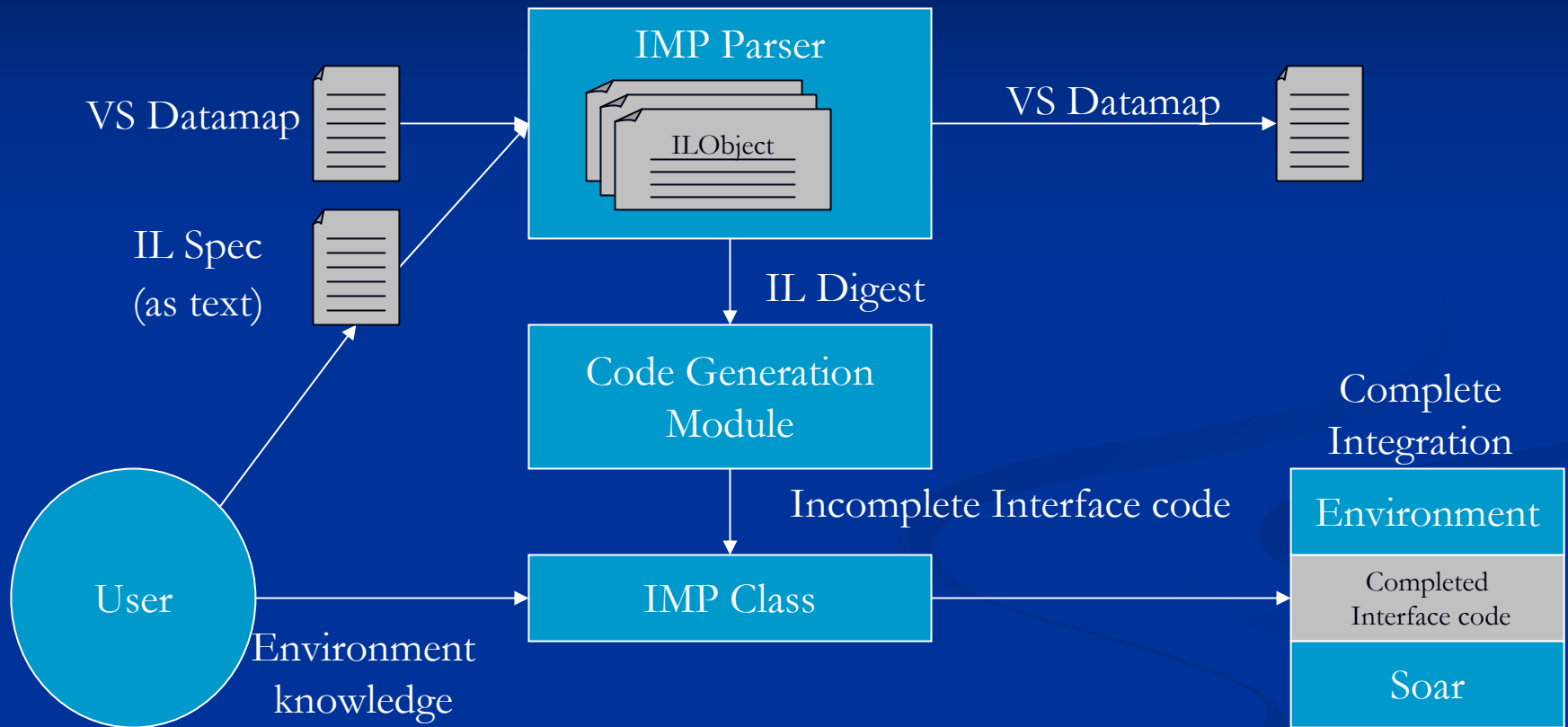
Interface Code

Environment

Interface code

Soar

System Overview



Example Specification

```
tron.il - WordPad
File Edit View Insert Format Help
-class tron
ILRoot ^name <Id> Tron
Tron ^type <str> -start "movie"
Tron ^period <str> -start "80s"
-end tron
```

```
void CreateTron(Agent& agent)
{
    Identifier* Tron = CreateIdWME(agent.GetInputLink(), "name");
    StringElement* string0 = CreateStringWME(Tron, "type", "movie");
    m_stringWMEs.push_back(string0);
    StringElement* string1 = CreateStringWME(Tron, "period", "80s");
    m_stringWMEs.push_back(string1);
    agent.Commit();
}
```

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Current Status

- Can parse the IL specification and generate C++ SML code for IL creation
- Cannot parse datamap, cannot create datamap from spec

Future Work

- Generate code from VisualSoar datamaps
- Generate Java SML Code
- Create GUI front-end
- Convert to Eclipse Plug-in

Nuggets & Coal

- Nuggets
 - Higher level of abstraction than SML
- Coal
 - Still in early stages
 - Requires programmer to copy/paste, tweak auto-gen code