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LISBOA

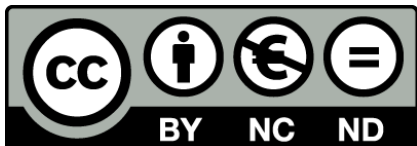


# Tracer for Java™

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MEIC–A :: Programação Avançada

# Arquitetura da solução

## □ Packages

- `ist.meic.pa`
- `ist.meic.pa.Trace`
- `ist.meic.pa.TraceVM`
- `ist.meic.pa.TraceTranslator`
- `ist.meic.pa.TraceVMExtended`
- `ist.meic.pa.TraceTranslatorExtended`



```
package ist.meic.pa;
```

## Trace

- Histórico de objectos tratados pelo Tracer

```
IdentityHashMap<Object, List<String>> history;
```

```
void print(Object);
```

```
void storeHistory(Object, String);
```

```
void manageStringCodeBefore(Object[], String);
```

```
void manageStringCodeAfter(Object, String);
```

**package** ist.meic.pa;

## TraceTranslator

**class** TraceTranslator implements **Translator**

**public void** onLoad(**ClassPool**, **String**);

**private void** makeHistorical(**CtClass**);

**final String** constructorTemplate;

**final String** methodTemplate;

instrument(**ExprEditor**);

# package ist.meic.pa.command;

## TraceVM

- ❑ Método `main(String[] args)`
- ❑ Instancia um `ClassLoader`
- ❑ Instancia e atribui-lhe um `TraceTranslator`

```
delegateLoadingOf("ist.meic.pa.Trace");  
run(args[0], restArgs);
```

```
package ist.meic.pa;
```

```
TraceVMExtended
```

```
class TraceTranslatorExtended extends  
    TraceTranslator
```

- Tratamento de *casts* e inclusão no histórico da classe *Trace*.
- Reutiliza código da superclasse e acrescenta o *event handler*.