

SCORM: Utilizzo e creazione di pacchetti in formato standard

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SCORM

Sharable Content Object Reference Model

Definisce:

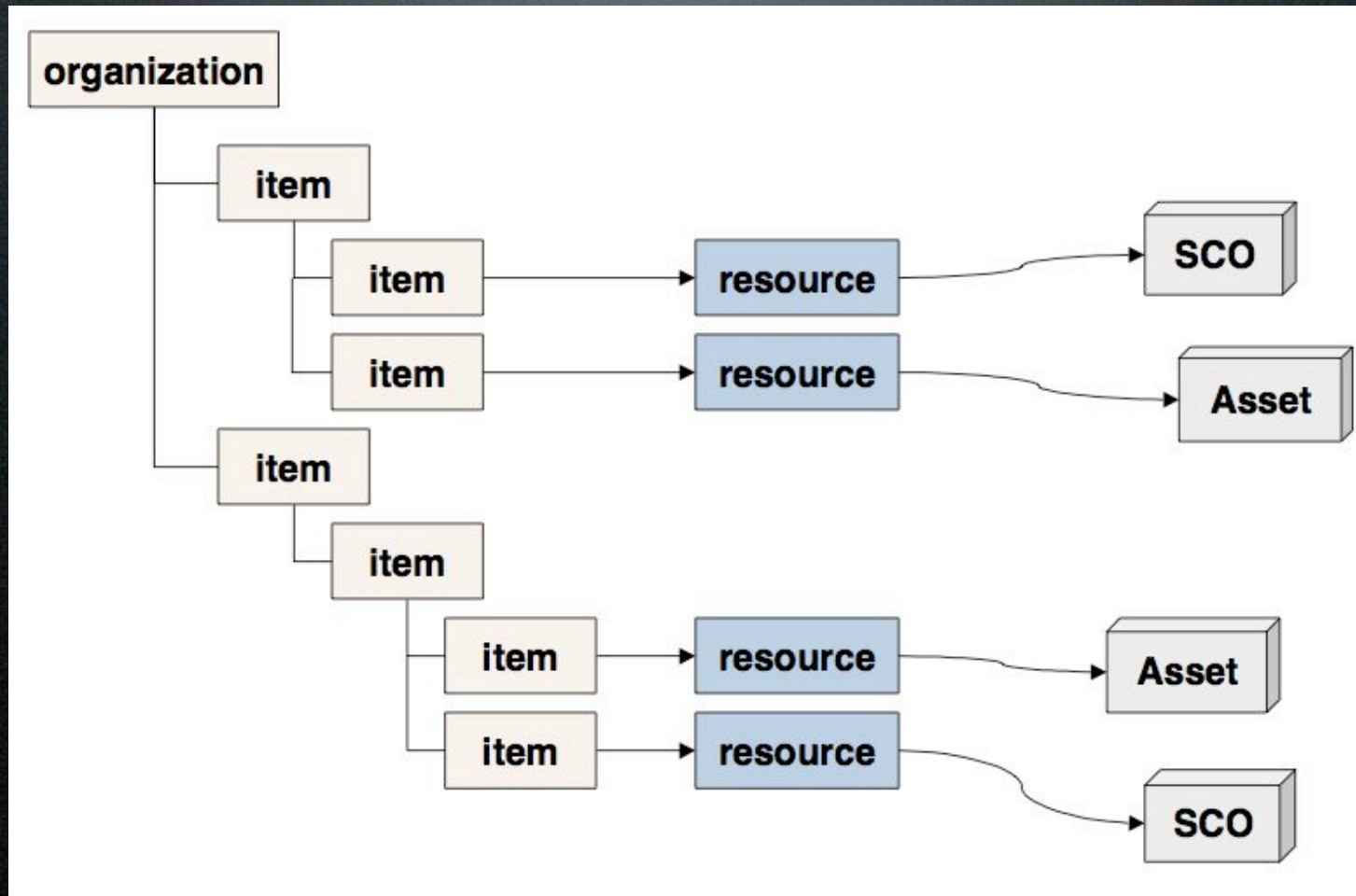
- un modello per la strutturazione dei contenuti
- l'interazione con l'ambiente di esecuzione
- un modello per la presentazione dinamica dei contenuti basati sulle necessità dello studente (SCORM1.3)

Content Aggregation



- PIF
Package
Interchange File
- imsmanifest.xml
- File risorse
(contenuti)

Organization



Esempio Organization

```
<organization identifier="TOC1">
  <title>Default Organization</title>
  <item identifier="ITEM1" identifierref="RESOURCE1">
    <title>Lesson 1</title>
  </item>
  <item identifier="ITEM2" identifierref="RESOURCE2">
    <title>Lesson 2</title>
  </item>
  <item identifier="ITEM3" identifierref="RESOURCE3">
    <title>Lesson 3</title>
  </item>
</organization>
```

Esempio Resources

```
<resources>
  <resource identifier="R_A1" type="webcontent" href="sco06.html">
    <metadata/>
    <file href="sco06.html" />
    <file href="scripts/APIWrapper.js" />
    <file href="scripts/Functions.js" />
    <dependency identifierref="R_A4" />
    <dependency identifierref="R_A5" />
    <dependency identifierref="R_A6" />
  </resource>
  <resource identifier="R_A2" type="webcontent" href="sco1.html">
    <metadata/>
    <file href="sco1.html" />
    <file href="scripts/APIWrapper.js" />
    <file href="scripts/Functions.js" />
    <dependency identifierref="R_A5" />
  </resource>
  <resource identifier="R_A4" type="webcontent" href="pics/distress_sigs.jpg">
    <metadata/>
    <file href="pics/distress_sigs.jpg" />
  </resource>
  <resource identifier="R_A5" type="webcontent" href="pics/distress_sigs_add.jpg">
    <metadata/>
    <file href="pics/distress_sigs_add.jpg" />
  </resource>
  <resource identifier="R_A6" type="webcontent" href="pics/nav_aids.jpg">
    <metadata/>
    <file href="pics/nav_aids.jpg" />
  </resource>
</resources>
```


Prerequisiti

SCORM 1.2

```
<item identifier="I0">  
  <item identifier="I1" identifierref="R_I1">  
    <item identifier="I2" identifierref="R_I2">  
      <item identifier="I3" identifierref="R_I3">  
        <adlcp:prerequisites type="aicc_script">  
          I1&I2</adlcp:prerequisites>  
        </item>  
      </item>  
    </item>  
  </item>
```

Linguaggio: aicc_script

Operatori:

& AND

| OR

~ NOT

= uguale

<> diverso

X* “multiplicatore”

{ } insieme

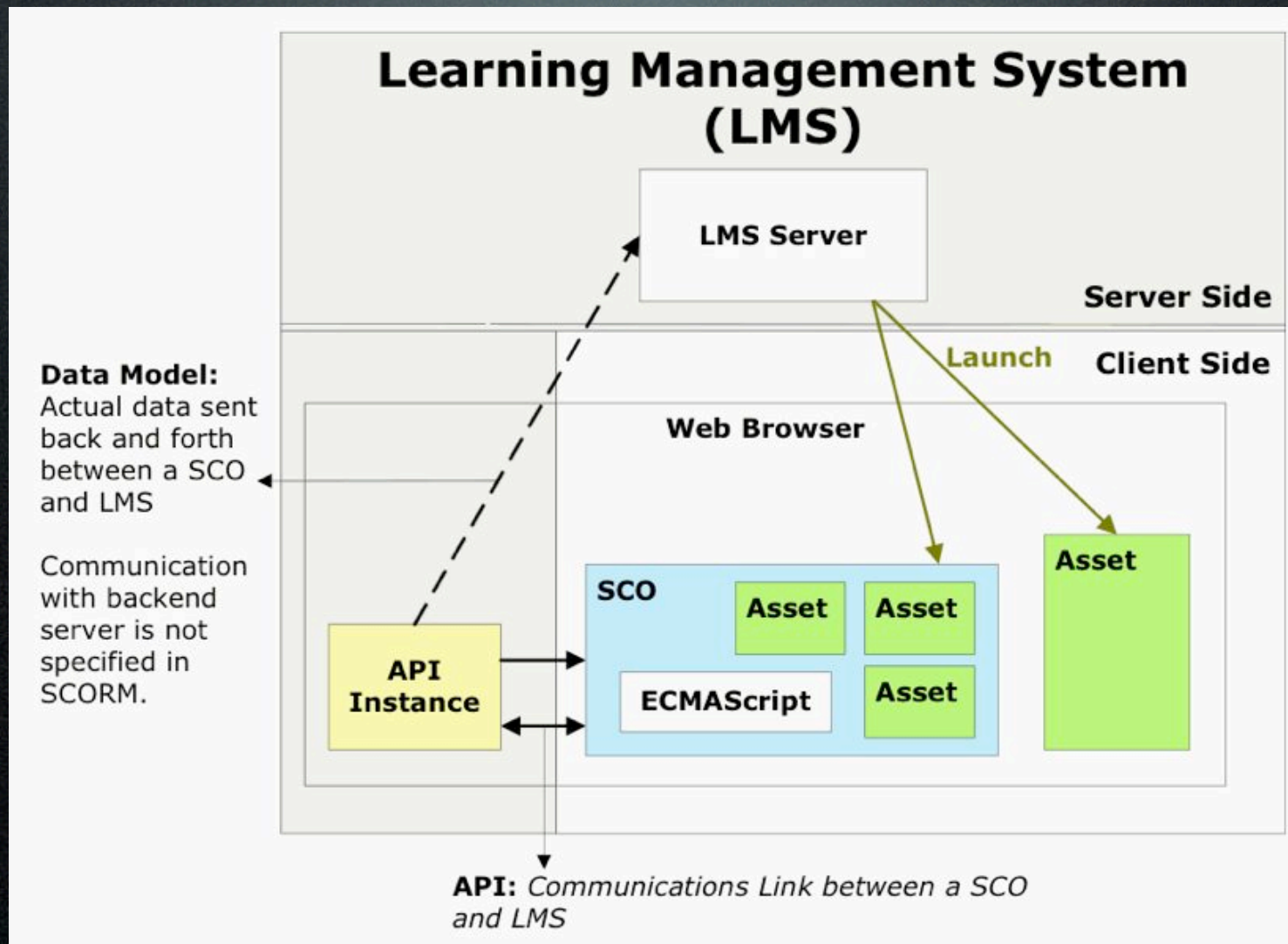
, separatore

() precedenza

Prerequisiti: esempi

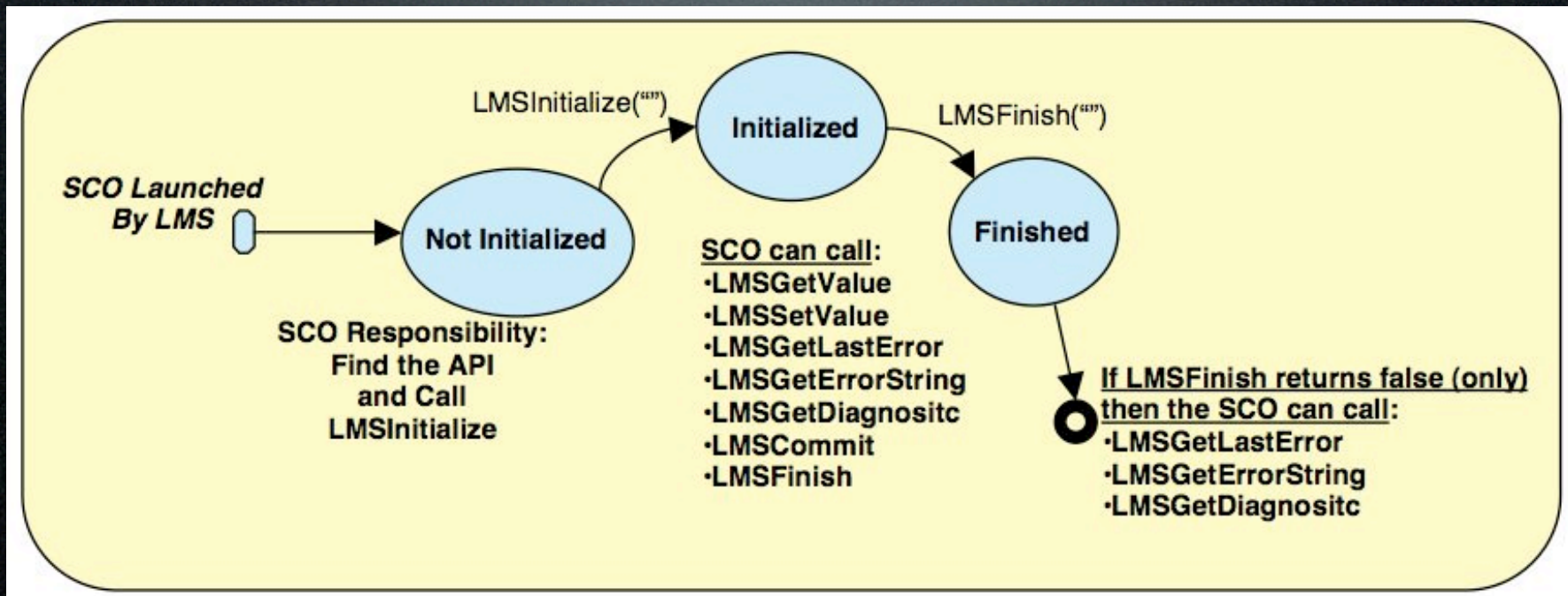
- $A3 = \text{"passed"} \wedge A5$
- $B2 \neq \text{"failed"} \mid \sim B3$
- $3 * \{A3 = \text{"passed"}, A5, B2 \neq \text{"failed"}, \sim B3\}$
- $B2 \wedge (A3 \mid B2)$

Interazione SCO-LMS

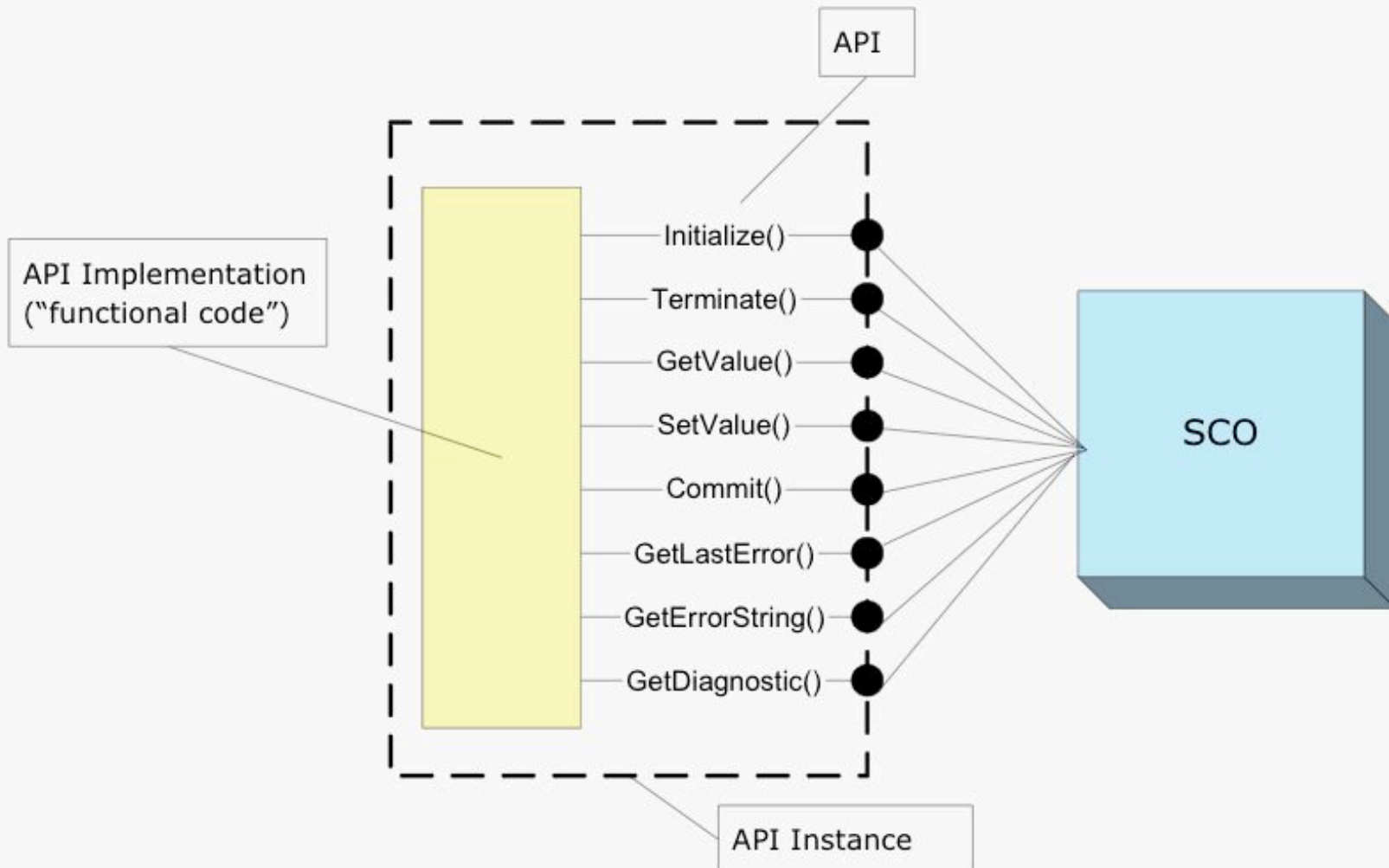


API

Application Programming Interface



API 1.3



Interazione SCO - API

esempio

```
<html>
  <head>
    <title>Esempio SCO</title>
    <script language="javascript" src="util/APIWrapper.js"></script>
    <script language="javascript" src="util/SCOFunctions.js"></script>
  </head>

  <body>
    <script language="javascript">
      loadPage();
      var  studentName = "!";
      var  lmsStudentName = doLMSGetValue( "cmi.core.student_name" );

      if ( lmsStudentName != "" ) {
        studentName = " " + lmsStudentName + " !";
      }
      document.write(studentName);
      doContinue(completed);
    </script>
  </body>
</html>
```


SCORM 1.2 Data Model

Elementi Obbligatori

cmi._children
cmi._version
cmi.core._children
cmi.core.student_id
cmi.core.student_name
cmi.core.lesson_location
cmi.core.credit
cmi.core.lesson_status
cmi.core.entry
cmi.core.score._children
cmi.core.score.raw
cmi.core.score.max
cmi.core.score.min
cmi.core.total_time
cmi.core.lesson_mode
cmi.core.exit
cmi.core.session_time
cmi.suspend_data
cmi.launch_data

Elementi Opzionali

cmi.comments
cmi.comments_from_lms
cmi.objectives._children cmi.objectives._count
cmi.objectives.n.id cmi.objectives.n.score._children
cmi.objectives.n.score.raw cmi.objectives.n.score.min
cmi.objectives.n.score.max cmi.objectives.n.status
cmi.student_data._children
cmi.student_data.mastery_score
cmi.student_data.max_time_allowed
cmi.student_data.time_limit_action
cmi.student_preference._children
cmi.student_preference.audio
cmi.student_preference.language
cmi.student_preference.speed
cmi.student_preference.text
cmi.interactions._children cmi.interactions._count
cmi.interactions.n.id
cmi.interactions.n.objectives._count
cmi.interactions.n.objectives.n.id
cmi.interactions.n.time cmi.interactions.n.type
cmi.interactions.n.correct_responses._count
cmi.interactions.n.correct_responses.n.pattern
cmi.interactions.n.weighting
cmi.interactions.n.student_response
cmi.interactions.n.result cmi.interactions.n.latency

That's all folks !

Domande ?