



教育関連データのデータ連携の実現に向けた実証調査研究

LTI 1.3 1EdTech 開発ツール 説明会

2023/1/26

日本IMS協会

IMS Global Certified Trainer: IMS認定 訓練/実装支援管理士

秦 隆博

内容

- 開発実装に向けた解説 ← 2022年12月12日勉強会
 - LTI 1.3 CORE 技術標準概要
 - LTI 1.3 開発支援リソース
- 1EdTech LTI 1.3 実装支援ツール紹介
 - Reference Implementation : リファレンス・インプリメンテーション : **RI**
 - ← 2022年12月27日勉強会
 - Conformance Test Suite : **TS** : コンFORMANCE・テスト・スイート

Conformance Test Tool

コンFORMANCE・テスト・ツール

1EDTECH LTI 1.3 実装支援ツール

内容

- 1EdTech LTI 1.3 実装支援ツール紹介
 - Conformance Test Suite : TS: コンFORMANCE・テスト・ツール
 - ログイン方法
 - TS [Platform , Tool] と RI [Platform , Tool] 間の接続テスト
 - TS – RI 接続用 RI TEAM: 「DA-LTI-Training TestSuit」
 - Test Suit による開発支援ステップ
 - » 注意点: シングルバイト制約
 - » 事前接続設定の確認
 - » **テストケース**の理解

Conformance Test Tool 起動手順 方法

Development Resources | IMS

Record		CLR Consumer CLR Provider CLR Editor	Record Certification Details
Common Cartridge	Specification	Valid Test Sets Common Cartridge Tools	Test Suite - Member Validator Common Cartridge Certification Process
Learning Information Systems	Specification	LIS Tools	Test Suite - Sync Agent Test Suite - Ref Agent LIS Certification Process
Learning Tools Interoperability	Specification	Reference Implementation	Assignment and Grades v2
Learning Tools Interoperability Proctoring Services	Specification		Test Suite

1EDTECH

HOME

Log in

Log in Create new account Reset your password

Username or email address. *
t-hata@imsjapan.org

Password *
●●●●●●

Log in

Welcome, t-hata@imsjapan.org

Membership Events News Global Specifications My 1EdTech Log out

1EDTECH

WORKSTREAMS - STANDARDS - CERTIFIED PRODUCTS - LEARNING IMPACT - LEADERSHIP

Learning Tools Interoperability (LTI) Certification Suite

The goal of the LTI Certification Test Suite is to encourage interoperable implementations of both systems such as LMSs or portals (Platforms) and External Applications or Content (Tools).

LTI v1.3 and LTI Advantage Certification Test Suite

To achieve certification to the latest version of LTI v1.3 and the LTI Advantage Certification Test Suite (v2.0), visit the test suite here:
<https://ltiadvantagevalidator.imglobal.org/ltiadv/certification.html>

Legacy versions of LTI (v1.0, v1.1, v1.1.1, v1.2 and v2.0)

Use refer to the announcements for more details:
<https://www.imglobal.org/lti-security-announcement> and <https://www.imglobal.org/lti-security-announcement>

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Member User Setup
LTI Advantage Certification Suite - v 1.1.1f

4

Confirm your contact information below

Your Name
Takahiro Hata

Your Email
t-hata@imsjapan.org

Next >

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<https://ltiadvantagevalidator.imglobal.org/ltiadv/index.html>

Conformance Test Tool 起動手順 方法2

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<https://www.msglobal.org/lti-certification-suite>

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HOME > MEMBERSHIP > MEMBERS > IMS JAPAN SOCIETY

Takahiro Hata
Project Manager @ IMS Japan Society
t-hata@imsjapan.org • JP

View Edit

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HOME

Log in

Log in Create new account Reset your password

Username or email address. *
t-hata@imsjapan.org

Enter your username or email address

Password *
●●●●●●

Log in

ReferenceTool x Learning Tools Interoperability x

https://www.msglobal.org/lti-certification-suite

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Learning Tools Interoperability (LTI) Certification Suite

The goal of the LTI Certification Test Suite is to encourage interoperable implementations of both systems such as LMSs or portals (Platforms) and External Applications or Content (Tools).

LTI v1.3 and LTI Advantage Certification Test Suite

To achieve certification to the latest version of LTI v1.3 and the LTI Advantage Certification Test Suite (LTIAdv) v2.0, visit the test suite here:
<https://ltiadvantagevalidator.msglobal.org/ltiadv/certification.html>

Legacy versions of LTI (v1.0, v1.1, v1.1.1, v1.2 and v2.0)

Use refer to the announcements for more details:
<https://www.msglobal.org/lti-security-announcement> and [certification-schedule](#)

IMS GLOBAL
LTI Advantage

About -

Member User Setup
LTI Advantage Certification Suite - v 1.1.1f

4

Confirm your contact information below

Your Name
Takahiro Hata

Your Email
t-hata@imsjapan.org

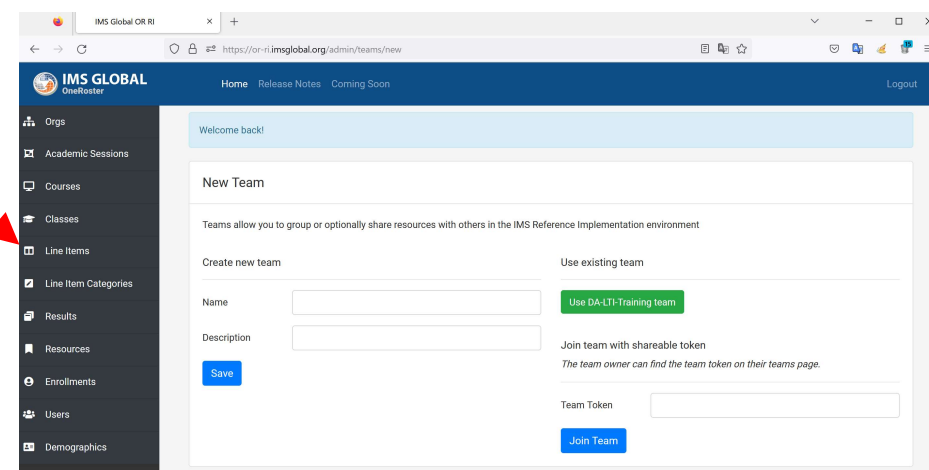
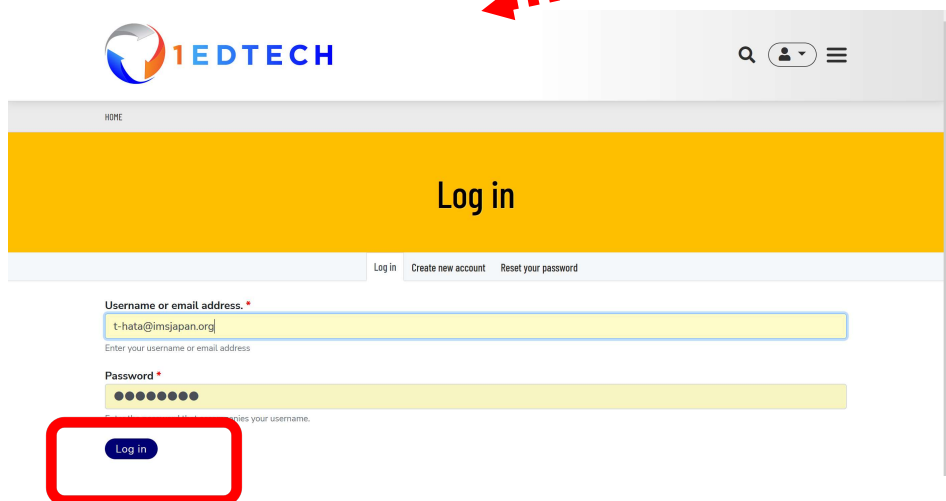
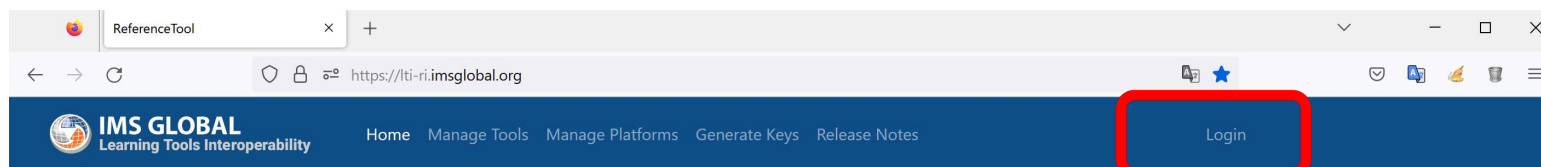
Next >

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<https://ltiadvantagevalidator.msglobal.org/ltiadv/index.html>

RI Test Tool 起動手順 方法2

<https://lti-ri.imsglobal.org/>



Team作成/参加

New Team

Teams allow you to group or optionally share resources with others in the IMS Reference Implementation environment

Create new team

Name

Description

[Save](#)

Use existing team

[Use DA-LTI-Training team](#)

[Use DA-LTI-Training TestSuit team](#)

Join team with shareable token
The team owner can find the team token on their teams page.

Team Token

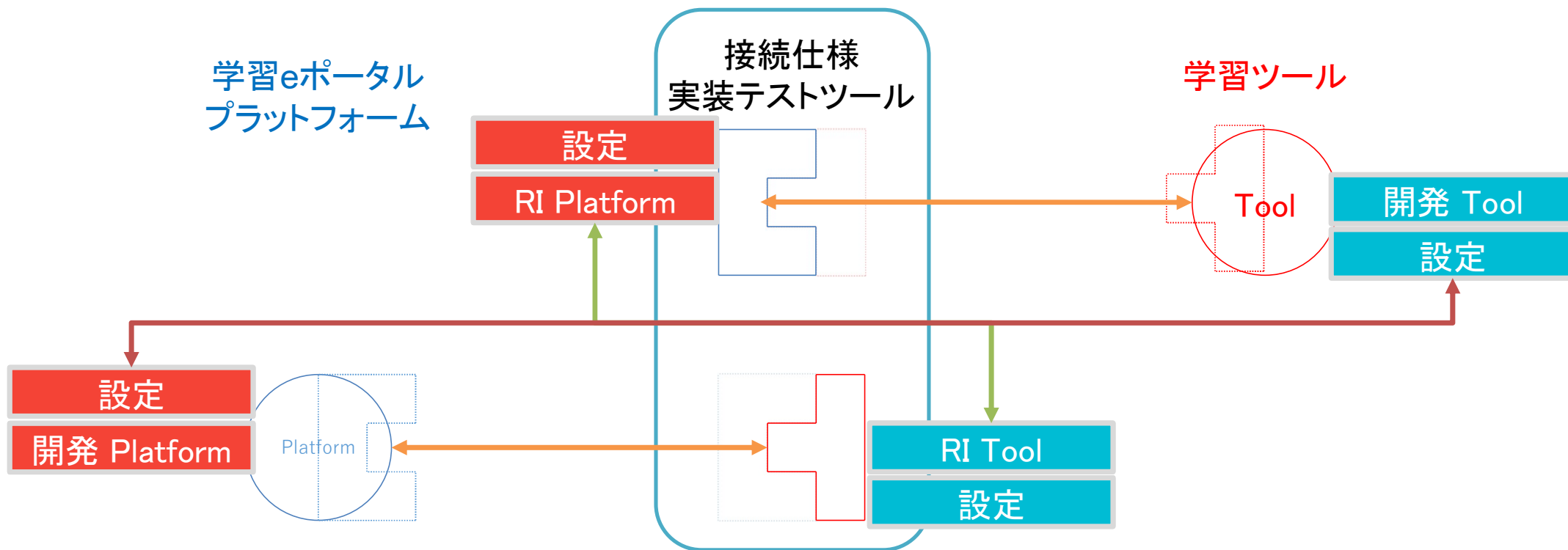
[Join Team](#)

Name	Description	Team Token
DA-LTI-Training TestSuit	DA-LTI-Training TestSuit	52da8621-7d76-478b-9f0f-664581a13da9

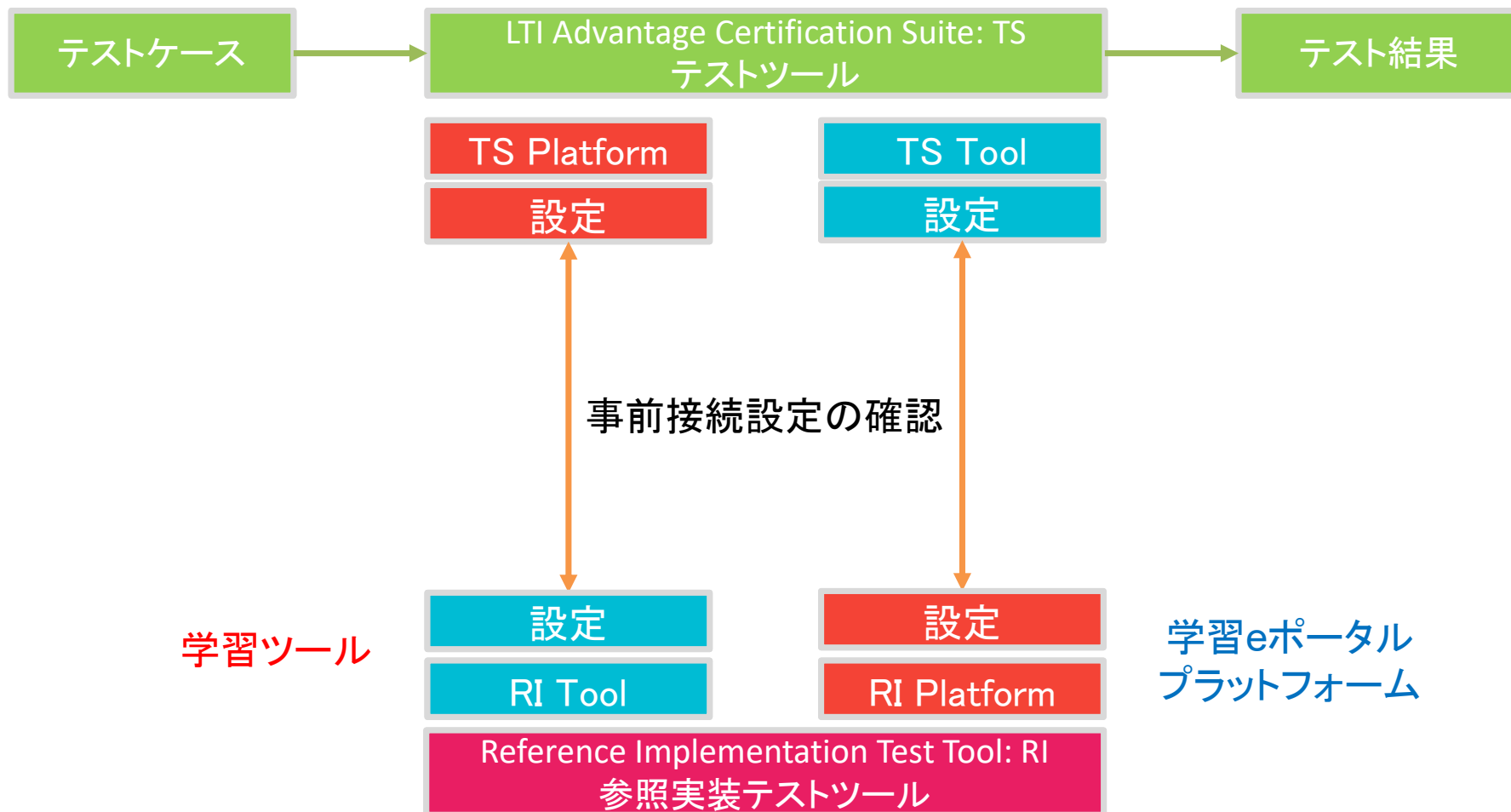
Listing Teams					
Id	Name	Description	Key	Secret	Team Token
295	DA-LTI-Training TestSuit	DA-LTI-Training TestSuit	70587328-9ba7-11ed-9e5b-8eef9729f774	7058792c-9ba7-11ed-9d78-8eef9729f774	52da8621-7d76-478b-9f0f-664581a13da9

RI による開発支援ステップ

Reference Implementation Test Tool: RI
参照実装テストツール

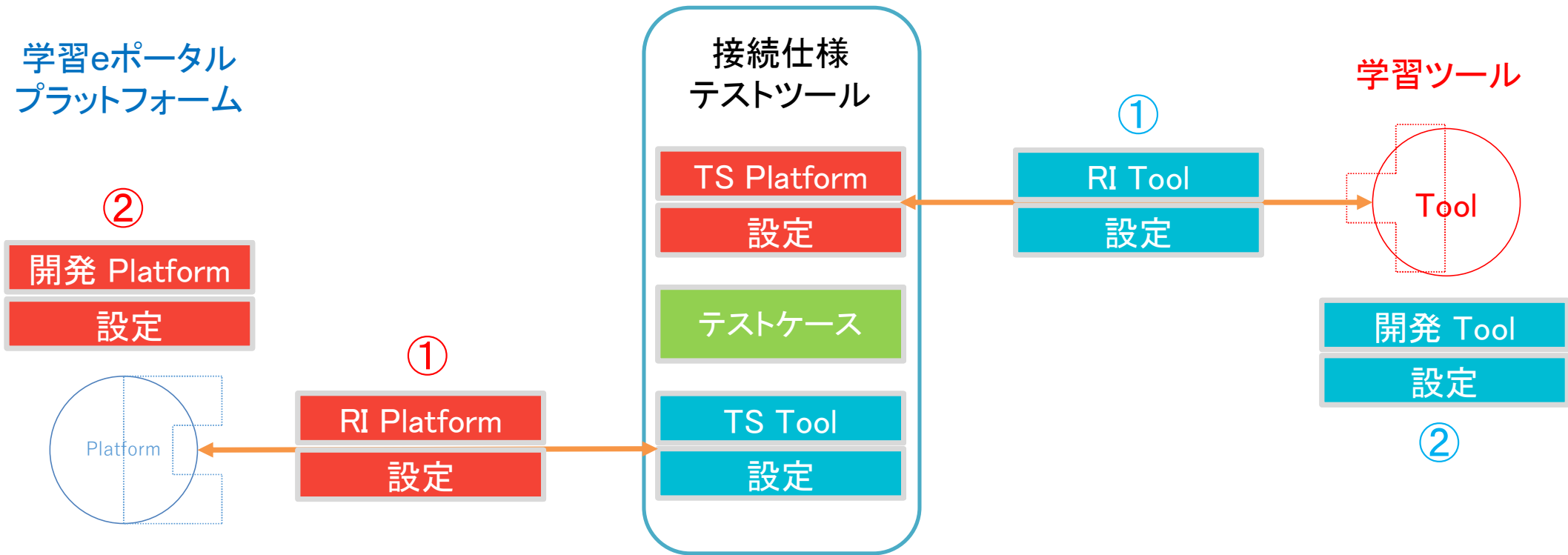


Test Suit と RI による開発支援ステップ



Test Suit による開発支援ステップ

LTI Advantage Certification Suite: TS
テストツール



LTI Advantage Certification Suite: Test Suite : TS

- Platform/Toolの接続シミュレーション
 - RI: LTI仕様に基づいた「送受信データ: Claim」の確認
 - 接続確認(プロトコル, データ)
 - 開発フェーズ: 独自ユースケース & テストケース
 - TS: LTI仕様に基づいた「テストケース」による挙動確認
 - 開発PlatformとTS Tool/開発ToolとTS Platformの接続設定
 - テストケース: 正常系/異常系(エラー処理)
 - 全てのテストをクリアした結果データを送信すると認定可能
 - 今回のプロジェクトでは認定は範囲外

利用ポイント

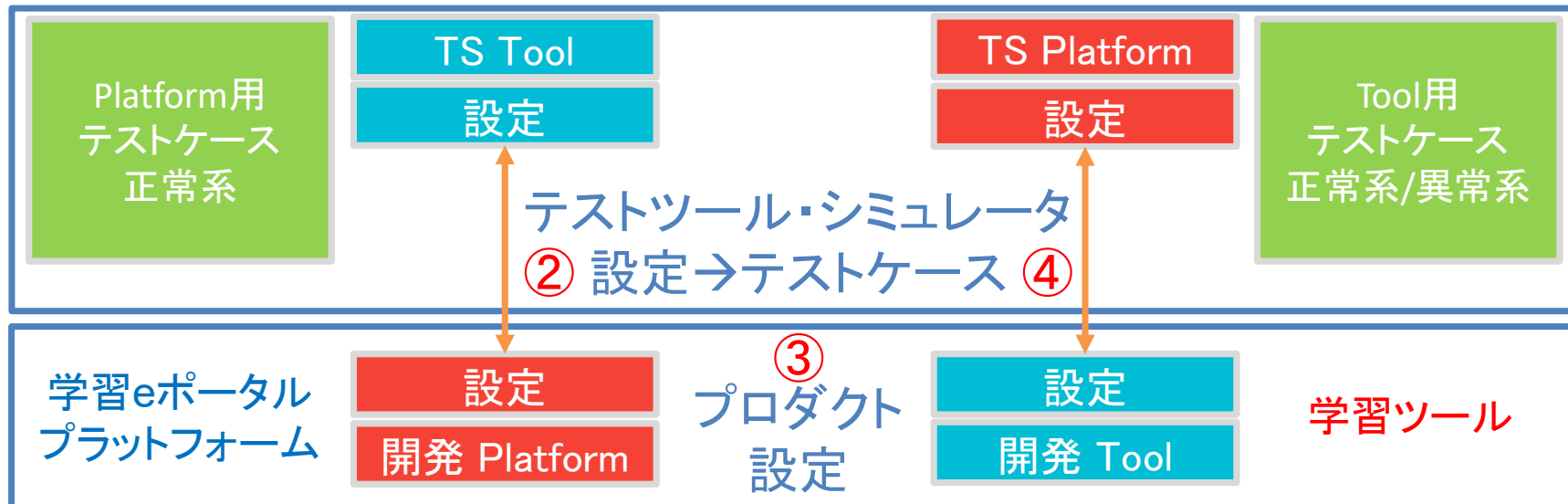
- LTI[®] Advantage Certification Suite Instructions : Instructions.pdf
- 入力プロファイルに基づいて再現・再開
 - 失敗しても、繰り返し実施可能
 - Profileデータなど入力値はシングルバイト
 - 事前接続登録設定
- 仕様に基づいた「テストケース」の項目理解
 - 正常系(Role: Learner/Instructor, PII/NoPII)
 - 異常系(エラー処理: LTI Library Error Message)
- テスト方法, テスト結果記録方法, (認定請求方法)

Test Suit による開発支援ステップ

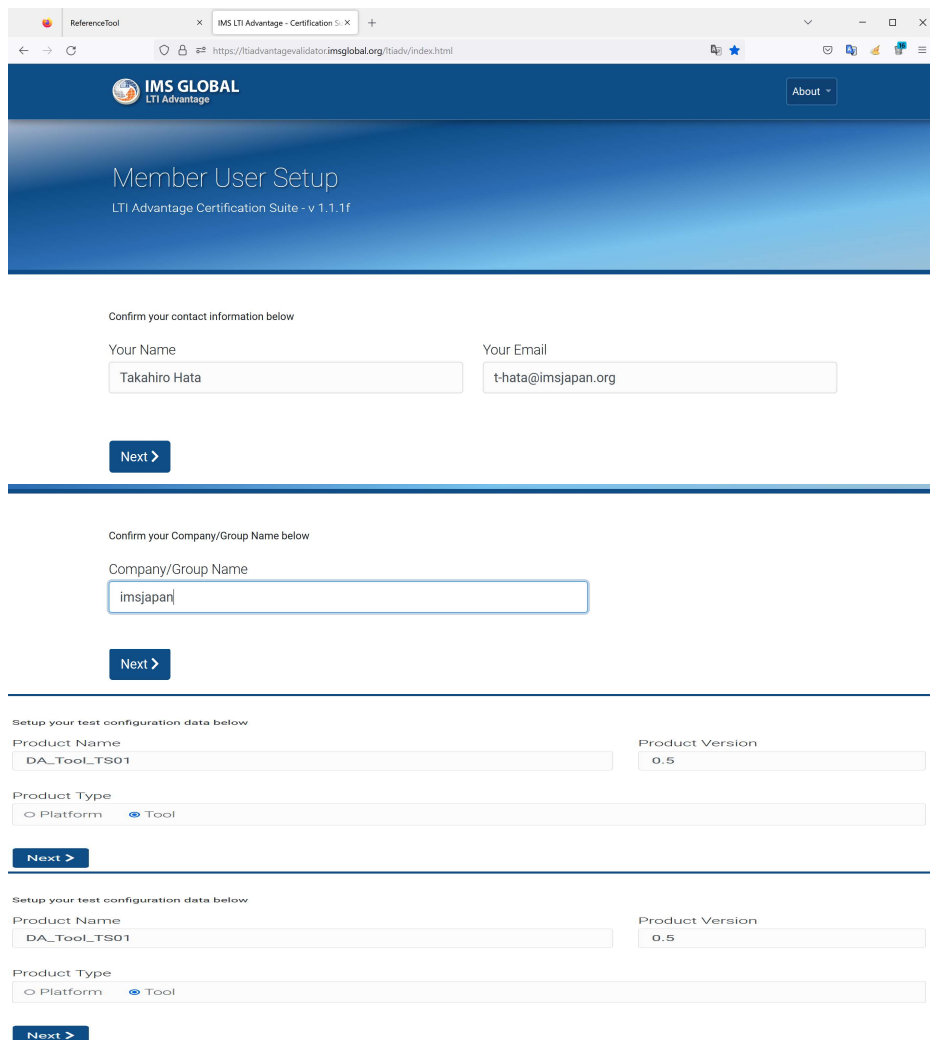
LTI Advantage Certification Suite: TS
テストツール

Instructions.pdf : LTI ® Advantage Certification Suite Instructions

① プロファイル : Product Type [Platform , Tool]



TS プロファイル設定



ReferenceTool x IMS LTI Advantage - Certification S... x
 https://ltiadvantagevalidator.imsjapan.org/itadv/index.html

IMS GLOBAL
LTI Advantage

About

Member User Setup
LTI Advantage Certification Suite - v 1.1.1f

Confirm your contact information below

Your Name
Takahiro Hata

Your Email
t-hata@imsjapan.org

Next >

Confirm your Company/Group Name below

Company/Group Name
imsjapan

Next >

Setup your test configuration data below

Product Name
DA_Tool_TS01

Product Version
0.5

Product Type
 Platform Tool

Next >

Setup your test configuration data below

Product Name
DA_Tool_TS01

Product Version
0.5

Product Type
 Platform Tool

Next >



Your Name: **Takahiro Hata**

Your Email: **t-hata@imsjapan.org**

Company/Group Name: **imsjapan**

Product Name: **DA_Tool_TS01**

Product Version: **0.5**

Product Type: [Platform , **Tool**]

Product Typeによりテストモデルが確定

Tool Testing

DA_Tool_TS01

Test Configuration
LTI Advantage Certification Suite (Tool Testing)
Please Insert URLs Below for your Tool Setup

RI Tool

設定

Your Tool Configuration

Tool End-Point to Receive Launches

(Note: this is the target_link_url that the cert suite will send in OIDC initiation.)

<https://lti-ri.imsglobal.org/lti/tools/3550/launches>

OIDC Login Initiation URL

(Note: this is your tool's OIDC initiation URL.)

https://lti-ri.imsglobal.org/lti/tools/3550/login_initiations

Tool OIDC Launch Redirect URL

(Note: this should be the REGISTERED URL for your Tool. The cert suite POSTs launches here!)

<https://lti-ri.imsglobal.org/lti/tools/3550/launches>

Tool End-Point to Receive Deep Link Launches

(Note: this is the target_link_url that the cert suite will send in OIDC initiation for Deep Linking.)

https://lti-ri.imsglobal.org/lti/tools/3550/deep_link_launches

Tool OIDC Redirect Deep Linking URL

(Note: this is the REGISTERED URL in OIDC for your Tool's Deep Linking. The cert suite POSTs launches here!)

https://lti-ri.imsglobal.org/lti/tools/3550/deep_link_launches

Start Testing With:

(Note: You Should Know What You Are Doing to Skip Core Testing!)

- Deep Linking Linking UI Flow
- Names and Roles Service
- Assignments and Grades Service

Next >

RI 設定を
TS にペースト

Cert Suite (Platform) Configuration - PART I
LTI Advantage Certification Suite (Tool Testing)
Please Record the General Details of Platform Settings for Certification Suite

TS Platform

設定

Certification Configuration Details

Testing iss Value

(Note: the cert suite will send this value in the OIDC initialization)

<https://ltiadvantagevalidator.imsglobal.org>

OIDC Auth URL

(Note: this is the URL value for your Tool's OIDC auth call)

<https://ltiadvantagevalidator.imsglobal.org/ltitool/oidcauthurl.html>

Platform Well-Known/JWKS URL

<https://oauth2server.imsglobal.org/jwks>

OAuth2 Access Token URL

<https://ltiadvantagevalidator.imsglobal.org/ltitool/authcodejwt.html>

Next >

TS 設定を
RI にペースト

Tool Testing

Cert Suite Platform Configuration (PART II)
 LTI Advantage Certification Suite (Tool Testing)
 Please Choose the Details of the Testing Setup - Platform Test Emulation

ClientID

Platform Configuration Details

Your Client Id (Record this Value!)

imstester_d66e45b

Service Key Setup:

(Note: You MUST Choose ONE of the options below!)

- We Require a Private Key From the Platform
- We Deploy a Tool JWKS
- We Provide a PEM Public Key To Platforms

Enter Your *Tool's* JWKS Server:

(This must provide RS256 JWKS values for the provided KID)

https://lti-ri.imsglobal.org/lti/tools/3550/.well-known/jwks.json

Tool's JWKS

Next >

RI 設定を
TS にペースト

Platform Configuration (PART III)
 LTI Advantage Certification Suite (Tool Testing)
 Please Record the DeploymentId for this Cert Suite Testing

DeploymentID

Platform Configuration Details

Please Record the Deployment ID

We are *only* modeling a single-tenant deployment model. The Cert Suite has Provisioned the deployment for this client_id. Record the Deployment ID below.

Deployment Id (Provisioned for Tool Testing)

testdeploy

Next >

TS 設定を
RI にペースト

Tool Testing

Testing Values Setup

Please Insert Your Testing Values for Learner, Instructor, and Context

User , Context

User Setup

Generate!

Input Teacher Details

Teacher Id (LIS guid):

Teacher First Name:

Teacher Middle Name:

Teacher Last Name:

Teacher Email:

Input Student Details

Student Id (LIS guid):

Student First Name:

Student Middle Name:

Student Last Name:

Student Email:

Course Setup

Course Title:

Course Label:

Course Id:

Course Type: Select type:

(Optional) Resource Id:

Save Settings

Custom Tool Variables Configuration

LTI Advantage Certification Suite (Tool Testing)

Please Insert Required Custom Values For Your Tool

Custom Var

Your Tool Configuration

Custom Variable Name 1

Custom Variable Value 1

Custom Variable Name 2

Custom Variable Value 2

Custom Variable Name 3

Custom Variable Value 3

Custom Variable Name 4

Custom Variable Value 4

Custom Variable Name 5

Custom Variable Value 5

Next >

TS 設定を
RI にペースト

Tool Testing Value Setup

Testing Values Setup

Please Insert Your Testing Values for Learner, Instructor, and Context

User Setup

Generate!

1

Input Teacher Details	Input Student Details
Teacher Id (LIS guid): <input type="text" value="39890"/>	Student Id (LIS guid): <input type="text" value="40899"/>
Teacher First Name: <input type="text" value="Lauren"/>	Student First Name: <input type="text" value="Carrie"/>
Teacher Middle Name: <input type="text" value="Colleen"/>	Student Middle Name: <div style="border: 2px solid red; padding: 2px;">test</div>
Teacher Last Name: <input type="text" value="Hutton"/>	Student Last Name: <input type="text" value="Lowell"/>
Teacher Email: <input type="text" value="l.c.hutton@district1.com"/>	Student Email: <input type="text" value="c.lowell@district1.com"/>

2

Course Setup

Course Title:	<input type="text" value="Bio Adventures"/>
Course Label:	<input type="text" value="Biology 102"/>
Course Id:	<input type="text" value="8893483"/>
Course Type:	Select type: Course Section ▾
(Optional) Resource Id:	<input type="text" value="2ebcb16057704221bfef56t"/>

Save Settings

3

Custom Tool Variables Configuration

LTI Advantage Certification Suite (Tool Testing)

Please Insert Required Custom Values For Your Tool

Your Tool Configuration

Custom Variable Name 1	Custom Variable Value 1
<input type="text"/>	<input type="text"/>
Custom Variable Name 2	Custom Variable Value 2
<input type="text"/>	<input type="text"/>
Custom Variable Name 3	Custom Variable Value 3
<input type="text"/>	<input type="text"/>
Custom Variable Name 4	Custom Variable Value 4
<input type="text"/>	<input type="text"/>
Custom Variable Name 5	Custom Variable Value 5
<input type="text"/>	<input type="text"/>

Next >

RI Tool Testing 設定

Manage Tools Manage Platforms Generate Keys Release Notes

Manage Tools Manage Platforms Generate Keys Release Notes

Logged in as: t-hata@imsjapan.org Logout

Team: DA-LTI-Training TestSuit

LTI Tools

Add or manage Tool configurations.

Add Tool

Your Tools Unclaimed Tools

DA_Tool_TS01

Client ID: imstester_d66e45b

Tool launch URL: <https://lti-ri.imsjglobal.org/lti/tools/3550/launches>

Tool Deep Link URL: https://lti-ri.imsjglobal.org/lti/tools/3550/deep_link_launches

Tool OIDC Login Initiation URL: https://lti-ri.imsjglobal.org/lti/tools/3550/login_initiations

Tool JWT Key Set URL: <https://lti-ri.imsjglobal.org/lti/tools/3550/well-known/jwks.json>

Edit Delete

View Tool

View Tool Launches

Unclaim this Tool

Name: DA_Tool_TS01

Client: imstester_d66e45b

Private Key: -----BEGIN RSA PRIVATE KEY----- MIEpQIBAAKCAQE8ahgjsUC+MHewl45jNuqfzzTuSMgDKQilbF6phW8hHhWIsb7cltcTVmHAXBI01COXY0KEmHEc9jqJXMt9b339nllHQ8QeOd6UY4zArt29KQPyWxTJoEDsmFgnOfVh5pCXIEZqbOVqG/vLoz7SWJnxxDhOsDRSjv3WMXoTSJ9z9LI6+z cDUu1yqVLP3yUftwT8CXFizTWRA1Y5NdTizVmrNPd70qDqtZxbZqizU1FYYrkub/Q0PutsIOg+77uUillCbSFA56+PQ7eabR9SaN+pdjy5UUAOD9ppVwxqNhGpjDz3AxH0V/LHpRMYZ3llgUAynV4Uls1HGBVM3IMMtfKQIDAQABAoIBAQDZ1XHUwHrBSeFFqe7urkSulWI1DRiizlHwdh+c/xMEROU+rCeTd8woXX96n39GHON4KN7fWwn/c5T9 VSokzq1qlIdImqTGI00BLq+cHm3zLYehpJSB/IOT4Mxcn2UN+DOus/yLm+175io0 MZUFPFyV3KBwfHhiK1itM9nlErsbB05w4uYUWivYSxj69f8myzU/68aMJySLGDJA E5sX+gjuoD+viumwP8Kq3uS8YCwMoNXRHiKTP1NuMYoE/neyZtON+Ubr+maAktzkINbFmGY5us9s3SgeMAFAQDwLiMfdERS+fdAA30QT7f/tN554vAB4XQbmMi5PI5VW o9XoP5QBAoGBAP2BkeV31SuvShVW9pdjcfCKKpw3/spojnrEC85Cq0tX3WTjDIEk NeTanmUZzuHx93fmc2dXjSTEYWY60PoZ9C8beSDgNqYBHuiol0xwg1btjsbAZ+TA fxO+52fW9EmPI5rfghr/0gXtVxre /S+CrsevD6Q6thBg5HG0S3DhEnihAoGBAPQI 992kmzRWfdkrvIscb6GM1mlG2aJ0GatnL/Dje3Dzfp1BqT5E4cdzFiaj1ijKGEkQ QjYZ6sufJfybYWEKRFMkl46o7SIBPVIO4nFz3LqNPu6VFI09ArPgAw4RaVyKtU3B cpLcdbkOG+7FzoL0f6Pp5JEIfsPXMZbsalnJkjGJAoGAM2BpExpGJ4RU/VlSk6x8 T72QZN1sU9Uw2wyUX+7/DDv4cJPbuPifwgvUgiTi2sPRJYmc5drGjicGnlNZOva7 mDh3KgSGzsn3W6uHy9wZoiPu/zTLWX7xwiy0dUUJKUdLLf4SPiqOhAj /2EBNC63u giWmg+AqOdOJOMoTaAMVXUECgYEAIBCKmiJGMax8NaJndW8f6nCBdMJl7SVaOZFq DtD6/yXdHikST2fhNn6Zr8n /q7WLgAXBf35+T7injHOjH+s0Tet1BCUKkDlCa/tF W2l+mw/Y8m/vzX87ESrvtMlpX6KV48Qti3g/nevRpn0fV6SyRtFJqt6dQDPX70PE PACw9EECgYEAatG9bPV3hlsldE/Qyust37O8z9v+/0u9mrkC5uhZfZ4EueZ/lzDwu ZTcrtW0BJ7M2CVUSRJqUiRsOkzJslg9y+5MpsKrKpkzm/ugLgKSbpwHlAnfERZ5 /FjEYPctN11GlsV+meo96U6evOUeJ5JYswuR7csnRVELnapS5DE1nAw= -----END RSA PRIVATE KEY-----

Deployment ID: testdeploy

Keyset URL: <https://oauth2server.imsjglobal.org/jwks>

OAuth2 URL: <https://ltiadvantagevalidator.imsjglobal.org/ltitool/authcodejwt.html>

Platform OIDC Auth URL: <https://ltiadvantagevalidator.imsjglobal.org/ltitool/oidcauthurl.html>

Edit | Back

RI Tool Testing 設定

DA_Tool_TS01

Client Id: imstester_d66e45b

Tool launch URL: <https://lti-ri.msglobal.org/lti/tools/3550/launches>

Tool Deep Link URL: https://lti-ri.msglobal.org/lti/tools/3550/deep_link_launches

Tool OIDC Login Initiation URL: https://lti-ri.msglobal.org/lti/tools/3550/login_initiations

Tool JWT Key Set URL: <https://lti-ri.msglobal.org/lti/tools/3550/.well-known/jwks.json>

Deployment ID: testdeploy

Platform Keyset URL: <https://oauth2server.msglobal.org/jwks>

Platform OAuth2 URL: <https://ltiadvantagevalidator.msglobal.org/ltitool/authcodejwt.html>

Platform OIDC Auth URL <https://ltiadvantagevalidator.msglobal.org/ltitool/oidcauthurl.html>

TS Tool Testing 設定

 TS Platform自動設定

 手動設定/Key Generate

 RI Tool自動設定

(Tool) Name: DA_Tool_TS01

Platform Keyset URL: <https://oauth2server.msglobal.org/jwks>

Tool Private Key: -----BEGIN RSA PRIVATE KEY----- JTg= -----END RSA PRIVATE KEY-----

Tool JWT Key Set URL: <https://lti-ri.msglobal.org/lti/tools/3550/well-known/jwks.json>

Client Id: **imstester_d66e45b**

Deployment ID: **testdeploy**

Tool OIDC Login Initiation URL: https://lti-ri.msglobal.org/lti/tools/3550/login_initiations

Platform OIDC Auth URL <https://ltiadvantagevalidator.msglobal.org/ltitool/oidcauthurl.html>

Tool launch URL: <https://lti-ri.msglobal.org/lti/tools/3550/launches>

Tool Deep Link URL: https://lti-ri.msglobal.org/lti/tools/3550/deep_link_launches

OAuth2 URL: <https://ltiadvantagevalidator.msglobal.org/ltitool/authcodejwt.html>

Platform Testing

DA_Platform_CT01

Test Configuration - Tool Emulation
LTI Advantage Certification Suite (Platform Testing)
Please Note all URLs below for your Testing Setup

TS Tool
 設定

Certification Suite Tool Configuration

Tool End-Point to Receive Launches

(Note: this is the target_link_uri in the OIDC initiation. You may NOT POST here directly!)

OIDC Login Initiation URL

Tool OIDC Launch Redirect URL

(Note: this is the REGISTERED URL in OIDC. POST your launch here!)

Tool End-Point to Receive Deep Link Launches

(Note: this is the target_link_uri in the OIDC initiation for Deep Linking. You may NOT POST here directly!)

Tool OIDC Redirect Deep Linking URL

(Note: this is the REGISTERED URL in OIDC for Deep Linking. POST Deep Linking launch here!)

The JWKS for Tool Keys

(Note: Informational ONLY here!. Tool JWKS are optional. Your Tool signing method chosen later in platform setup!)

Start Testing With:

(Note: You Should Know What You Are Doing to Skip Core Testing!)

- Deep Linking UI Flow
- Names and Roles Service
- Assignments and Grades Service

[Next >](#)

 TS 設定を
 RI にペースト

Your Platform Configuration (PART I)
LTI Advantage Certification Suite (Platform Testing)
Please Insert the General Details of Your Platform

RI Platform
 設定

Platform Configuration Details

Testing iss Value

(Note: This will be value that you send in the OIDC initialization!)

OIDC Auth URL

(Note: This is your URL for OIDC Authentication Responses)

Platform Well-Known/JWKS URL

OAuth2 Access Token URL

[Next >](#)

 RI 設定を
 TS にペースト

Platform Testing

Platform Configuration (PART II)

LTI Advantage Certification Suite (Platform Testing)

Please Insert the Details of the Setup for this Cert Suite TOOL

ClientID

Platform Configuration (PART III)

LTI Advantage Certification Suite (Platform Testing)

Please Provision the Deployment for this Cert Suite TOOL

DeploymentID

Platform Configuration Details

Client Id (Assigned to Cert Suite)

client_01

OPTIONAL - Custom aud (For Service Calls)

http://ltiadvantagevalidator.imsglobal.org

Service Key Setup:

(Note: You MUST Choose ONE of the options below!)

- We Provide ALL Private Keys To Tools
- We Require ALL Tools Provide JWKS
- We Accept Tool Public Keys

The Tool's JWKS Server:

(Record this in your Platform)

https://oauth2server.imsglobal.org/jwks

Tool's JWKS

Next >

TS 設定を
RI にペースト

Platform Configuration Details

Please Provision the Deployment ID and Insert Below

We are *only* modeling a single-tenant deployment model. If you have not provisioned the deployment for this client_id, please do so now and input the Deployment ID below.

Deployment Id (Provisioned for Cert Suite)

DA_DeploymentID_TS01

Next >

RI 設定を
TS にペースト

RI Platform Testing 設定

Manage Tools Manage Platforms Generate Keys Release Notes

LTI Platforms

Add or manage Platform configurations.

[Add Platform](#)

[Your Platforms](#) [Unclaimed Platforms](#)

DA_Platform_TS01

Client Id: client_01

Tool Deep Link Endpoint:
<https://ltiadvantagevalidator.msglobal.org/ltiplatform/deeplinklaunch.html>

OAuth2 Access Token URL:
https://lti-ri.msglobal.org/platforms/3930/access_tokens

OIDC Auth URL: <https://lti-ri.msglobal.org/platforms/3930/authorizations/new>

[Edit](#) [Delete](#)

[View Platform](#)

[Unclaim this Platform](#)

Manage Tools Manage Platforms Generate Keys Release Notes Logged in as: t-hata@imsjapan.org Logout [Team: DA-LTI-Tools](#)

Platforms / DA_Platform_TS01

DA_Platform_TS01 [Edit Platform](#)

Platform Keys
Courses
Resource Links
For Line Items view courses
Results

Client Id: client_01

Tool Deep Link Endpoint: <https://ltiadvantagevalidator.msglobal.org/ltiplatform/deeplinklaunch.html>

OAuth2 Access Token URL: https://lti-ri.msglobal.org/platforms/3930/access_tokens

OIDC Auth URL: <https://lti-ri.msglobal.org/platforms/3930/authorizations/new>

Platform's public key: -----BEGIN PUBLIC KEY----- MIIBjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEArTel9jr158loFzRnNLqHj/oDzm6fduBz1Y7DSzoQrPQNpr+sKA4+Huz5FGZcndHjHeTBmFg1HX7nCFEKPKkUNhqu/KR3oLJa9wvFTJIBNQLMKIYMBL+B4W17Eva5z6g78hKhXyP4nqYR16OsoPfqquuER3/Ow0AWjcy77Hcmk8Garky/Z7/IMe67+OFAYGlp5RNRDyQUlkjVarU71TCNMLtHXbe/mZ7PliZwi9BInjJcfnkj38y+xeTp4FPTzOk7K7bQo0+mOAmEzC9nm1k79a3lujzY0CTHU3n1lyvs6u+InuhevcMfQ32bL4CQqcs121 IQIDAQAB -----END PUBLIC KEY-----

Platform's private key: -----BEGIN RSA PRIVATE KEY----- MIIEpAIBAAKCAQEArTel9jr158loFzRnNLqHj/oDzm6fduBz1Y7DSzoQrPQNpr+sKA4+Huz5FGZcndHjHeTBmFg1HX7nCFEKPKkUNhqu/KR3oLJa9wvFTJIBNQLMKIYMBL+B4W17Eva5z6g78hKhXyP4nqYR16OsoPfqquuER3/Ow0AWjcy77Hcmk8Garky/Z7/IMe67+OFAYGlp5RNRDyQUlkjVarU71TCNMLtHXbe/mZ7PliZwi9BInjJcfnkj38y+xeTp4FPTzOk7K7bQo0+mOAmEzC9nm1k79a3lujzY0CTHU3n1lyvs6u+InuhevcMfQ32bL4CQqcs121 IQIDAQAB -----END RSA PRIVATE KEY-----

Tool's public key:

Tool's JWT Key Set URL: <https://oauth2server.msglobal.org/jwks>

LTI Platform Keys

Add or manage Platform Key configurations.

[Add Platform Key](#)

DA_DeploymentID_Name_TS01_1

Platform: DA_Platform_TS01

Deployment ID: DA_DeploymentID_TS01

well-known/jwks URL
https://lti-ri.msglobal.org/platforms/3930/platform_keys/3604.json

Platform: DA_Platform_TS01

Deployment ID: DA_DeploymentID_TS01

well-known/jwks URL
https://lti-ri.msglobal.org/platforms/3930/platform_keys/3604.json

[Edit](#) [Delete](#)

[View Platform](#)

[View Platform Key](#)

Resource Link

Title: Resource_TITLE

Description: Resource_TITLE Description

Tool URL:
<https://ltiadvantagevalidator.msglobal.org/ltiplatform/toollaunch.html>

[Edit](#) [Delete](#)

[View Course](#)

[Select User for Launch](#)

Platform – Resource Link 設定

[Manage Tools](#)
[Manage Platforms](#)
[Generate Keys](#)
[Release Notes](#)

Logged in as: t-hata@imsjapan.org [Logout](#)

Team: DA-LTI-Training TestSuit

Editing Resource Link

Context

COURSE_TITLE

Title

Resource_TITLE

Description

Resource_TITLE Description

Tool link url

https://ltiadvantagevalidator.imsjglobal.org/ltiplatform/toollaunch.html

Login initiation url

https://ltiadvantagevalidator.imsjglobal.org/ltiplatform/oidcinitialize.html

Role (leave blank for Learner)

User identifier only for launch, no PII such as first name, email etc.

Save

[Show](#) | [Back](#)

Custom claim content

(this would normally be handled with custom substitution attributes)

Expected format is: {"acolor":"blue", "color_count": 2} - double quotes required

This will add these attributes to the custom claim for this resource link:

```
{
  "https://purl.imsjglobal.org/spec/lti/claim/custom": {
    "acolor": "blue",
    "color_count": 2
  }
}
```

Proctored (via IMS Proctoring Services Specification, default is false)

RI Platform Testing 設定

DA_Platform_TS01

Client Id: client_01

Tool Deep Link Endpoint: <https://ltiadvantagevalidator.msglobal.org/ltiplatform/deeplinklaunch.html>

Platform OAuth2 Access Token URL: https://lti-ri.msglobal.org/platforms/3930/access_tokens

Platform OIDC Auth URL: <https://lti-ri.msglobal.org/platforms/3930/authorizations/new>

Tool's JWT Key Set URL: <https://oauth2server.msglobal.org/jwks>

Platform Key

Deployment ID: DA_DeploymentID_TS01

Platform well-known/jwks URL https://lti-ri.msglobal.org/platforms/3930/platform_keys/3604.json

Resource Link

Tool URL: <https://ltiadvantagevalidator.msglobal.org/ltiplatform/toollaunch.html>

Login initiation url: <https://ltiadvantagevalidator.msglobal.org/ltiplatform/oidcinitialize.html>

Platform Testing 設定

 RI Platform自動設定

 手動設定/Key Generate

 TS Tool自動設定

```
(Platform) Name: DA_Platform_CS01
Platform public key: -----BEGIN PUBLIC KEY----- MIIBjAN-----END PUBLIC KEY-----
Platform well-known/jwks URL: https://lti-ri.msglobal.org/platforms/3930/platform_keys/3604.json
Platform private key: -----BEGIN RSA PRIVATE KEY----- MIIEMeY-----END RSA PRIVATE KEY-----

Tool JWT Key Set URL: https://oauth2server.msglobal.org/jwks

Client Id: client_01
Platform Keys Name: DA_DeploymentID_Name_TS01
Deployment ID: DA_DeploymentID_TS01

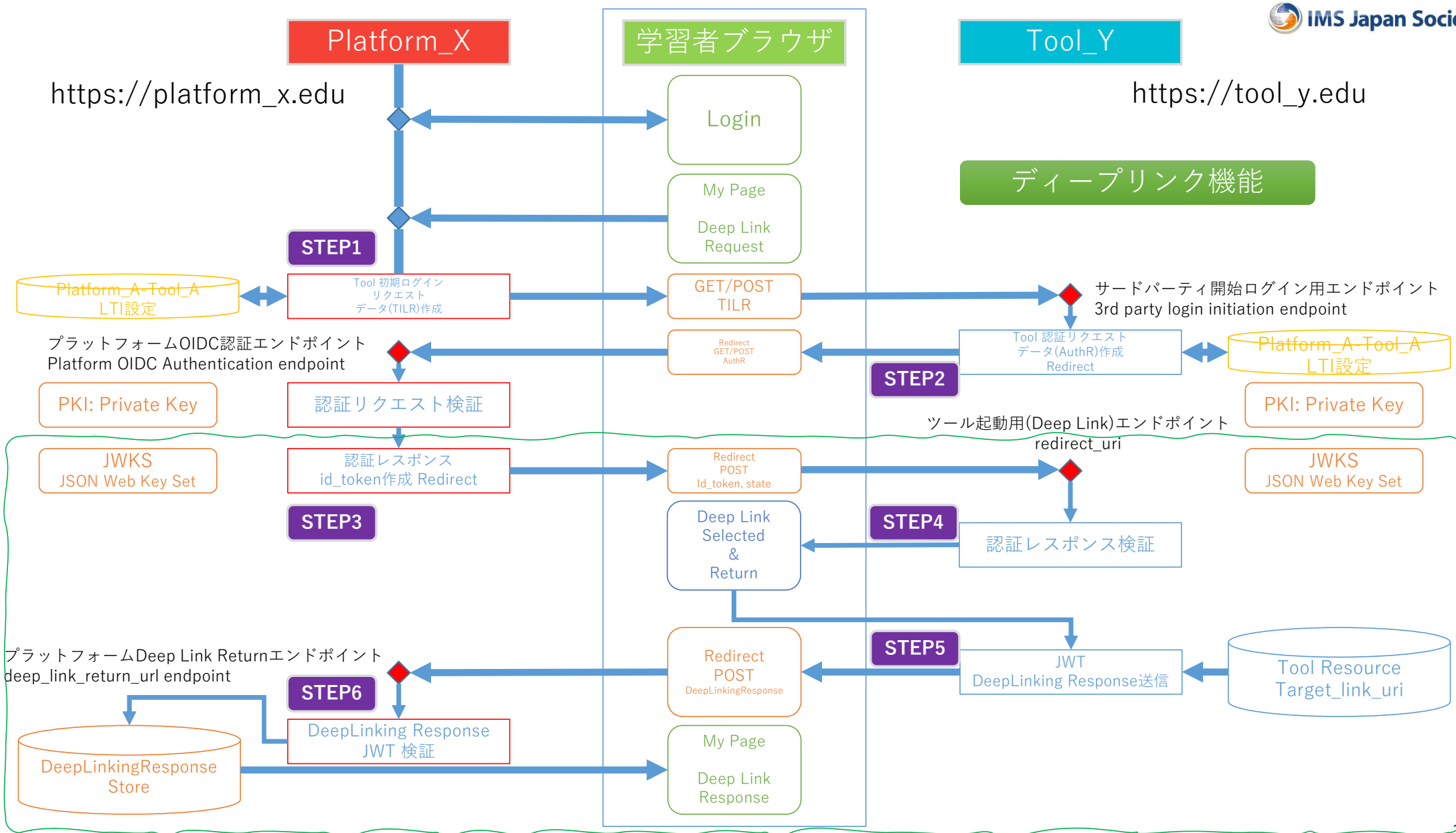
Course
Id: 54655
Label: COURSE001
Title: COURSE_TITLE
Type: Type_MyFirstCourse

Resource Link
Id: 74599
Title: Resource_TITLE
Description: Resource_TITLE Description

Login initiation url: https://ltiadvantagevalidator.msglobal.org/ltiplatform/oidcinitialize.html
OIDC Auth URL: https://lti-ri.msglobal.org/platforms/3930/authorizations/new
Tool link url(Tool URL): https://ltiadvantagevalidator.msglobal.org/ltiplatform/toollaunch.html

Tool Deep Link Endpoint: https://ltiadvantagevalidator.msglobal.org/ltiplatform/deeplinklaunch.html

OAuth2 Access Token URL: https://lti-ri.msglobal.org/platforms/3930/access_tokens
```



Test Suite / TS : テストケース実施

1EDTECH LTI 1.3 実装支援ツール

Tool Testing Case

- LTI v1.3 Core:
 - 30 Test Cases
 - 12 非正常系(Error)
 - 18 正常系
- Deep Linking:
 - 8 Test Cases
- Names and Role Provisioning Services
 - 5 Test Cases
- Tests for Assignment and Grade Services
 - 未対応

Test Type	Test Name	Test Result
JSON Claim	No XRD Sent	Failed
JSON Claim	XRD not passed in JWT Header	Failed
JSON Claim	Normalized XRD Sent	Failed
JSON Claim	Normalized XRD passed in JWT Header	Failed
JSON Claim	Wrong LTI Version	Failed
JSON Claim	LTI version passed in LTI 1.3	Failed
JSON Claim	Missing LTI Version	Failed
JSON Claim	No LTI version passed in claimVersion	Failed
JSON Claim	Invalid LTI Message	Failed
JSON Claim	Message passed in JWT LTI 1.3 JWT	Failed
JSON Claim	Missing JWT Fields	Failed
JSON Claim	One or more JWT Fields missing	Failed
JSON Claim	JWT Timestamp Invalid	Failed
JSON Claim	Exp or nbf not valid	Failed
JSON Claim	Message Type Invalid	Failed
JSON Claim	message_type Claim Missing	Failed
JSON Claim	Role Name Invalid	Failed
JSON Claim	role Claim Missing	Failed
JSON Claim	Deployment Claim Invalid	Failed
JSON Claim	Deployment ID Claim Missing	Failed
JSON Claim	Launch No session, No Id	Failed
JSON Claim	Launch ID's Missing session_id	Failed
JSON Claim	User Claim Invalid	Failed
JSON Claim	User Claim Missing	Failed
JSON Claim	Valid Instructor Launch	Passed
JSON Claim	Valid Instructor Launch with Roles	Passed
JSON Claim	Valid Instructor Launch Short Role	Passed
JSON Claim	Valid Instructor Launch Unknown Role	Passed
JSON Claim	Valid Instructor Launch No Role	Passed
JSON Claim	Valid Instructor Launch With No Role	Passed
JSON Claim	Valid Instructor Launch Email Only	Passed
JSON Claim	Valid Instructor Launch Names Only	Passed
JSON Claim	Valid Instructor No PE	Passed
JSON Claim	Valid Instructor Email Without Content	Failed
JSON Claim	Valid Instructor With Email No Content	Failed
JSON Claim	Valid Instructor Email Without Content	Failed
JSON Claim	Valid Instructor With Email No Content	Failed
JSON Claim	Valid Student Launch	Failed
JSON Claim	Valid Student Launch	Passed
JSON Claim	Valid Student Launch	Passed
JSON Claim	Valid Student Launch with Roles	Passed
JSON Claim	Valid Student Launch Short Role	Passed
JSON Claim	Valid Student Launch Unknown Role	Passed
JSON Claim	Valid Student with No Role	Passed
JSON Claim	Valid Student With No Role	Passed
JSON Claim	Valid Student No Header	Passed
JSON Claim	Valid Student Only Email	Passed
JSON Claim	Valid Student Launch Names Only	Passed
JSON Claim	Valid Student No PE	Passed
JSON Claim	Launch Student Resource Link Only	Passed
JSON Claim	Launch Student Only Resource Link	Passed

LTI 1.3 Deep Linking Results

Test Type	Test Name	Test Result
JSON Claim	Deep Linking - Send the Request Payload	NOT RUN
JSON Claim	Send Deep Linking Request Payload	NOT RUN
Payload	Deep Linking - Receive the Response Payload	NOT RUN
Payload	Get Deep Linking Response Payload	NOT RUN
JSON Claim	Deep Linking - Response Format Valid	NOT RUN
JSON Claim	Verify Response is Deep Linking Response	NOT RUN
JSON Claim	Deep Linking - Response Timestamps Valid	NOT RUN
JSON Claim	Deep Linking Verify Response Timestamps	NOT RUN
JSON Claim	Deep Linking - Signature Verified	NOT RUN
JSON Claim	Deep Linking - Verify JWT Signature	NOT RUN
JSON Claim	Deep Linking - Required Claims Verified	NOT RUN
JSON Claim	Deep Linking - Verify Required Claims Present	NOT RUN
JSON Claim	Deep Linking - Affirm Response	NOT RUN
JSON Claim	Deep Linking - Affirm Response Values	NOT RUN
JSON Claim	Deep Linking - (Optional) Launch DL LTI link	NOT RUN
JSON Claim	Deep Linking - Core Launch of Passed LTI Link	NOT RUN

LTI 1.3 Names and Roles Results

Test Type	Test Name	Test Result
JSON Claim	Names and Roles - (Optional) Launch Teacher	NOT RUN
JSON Claim	Names and Roles - Core Launch if Needed	NOT RUN
JSON	Names and Roles - Verify Request Received	NOT RUN
JSON	Names and Roles - Received Service Request	NOT RUN
JSON Header	Names and Roles - Verify Request Header	NOT RUN
JSON Header	Names and Roles - Verify Request Header	NOT RUN
JSON Header	Names and Roles - Verify Bearer Token	NOT RUN
OAuth2 Scope	Names and Roles - Verify OAuth2 Token	NOT RUN
OAuth2 Scope	Names and Roles - Verify Bearer Scope	NOT RUN
OAuth2 Scope	Names and Roles - Verify OAuth2 Scopes	NOT RUN

1.1.3 Assignments and Grades Results

No GradeBook Entries Found

LTI 1.3 Grade Book Entries Received

Tool Core Test Cases: 12 Error, 18 Success

JSON Claim

非正常系

正常系

#	Test Name	#	Test Name	#	Test Name
1	No KID Sent	11	Launch No resource_link_id	21	Valid Instructor Email Without Context
	KID not passed in JWT Header		Launch With Missing resource_link_id		Launch Instructor With Email No Context
2	Incorrect KID Sent	12	User Claim Invalid	22	Valid Student Launch
	Incorrect KID passed in JWT Header		user Claim Missing		Launch LTI 1.3 Message as Student
3	Wrong LTI Version	13	Valid Instructor Launch	23	Valid Student Launch with Roles
	LTI version passed is not 1.3		Launch LTI 1.3 Message as Instructor		Launch Student with Multiple Role Values
4	Missing LTI Version	14	Valid Instructor Launch with Roles	24	Valid Student Launch Short Role
	No LTI version passed in claim/version		Launch Instructor with Multiple Role Values		Launch Student with Short Role Value
5	Invalid LTI Message	15	Valid Instructor Launch Short Role	25	Valid Student with Unknown Role
	Message passed is NOT LTI 1.3 JWT		Launch Instructor with Short Role Value		Launch Student with Unknown Role
6	Missing JWT Fields	16	Valid Instructor Launch Unknown Role	26	Valid Student with No Role
	One or more JWT fields missing		Launch Instructor with Unknown Role		Launch Student With No Role
7	JWT Timestamps Invalid	17	Valid Instructor Launch No Role	27	Valid Student No Names
	Exp and lat Fields invalid		Launch Instructor With No Role		Launch Student Only Email
8	Message Type Invalid	18	Valid Instructor Launch Email Only	28	Valid Student Launch Names Only
	message_type Claim Missing		Launch Instructor Only Email		Launch Student Only Names
9	Role Claims Invalid	19	Valid Instructor Launch Names Only	29	Valid Student Launch No PII
	role Claim Missing		Launch Instructor Only Names		Launch Student No PII
10	Deployment Claim Invalid	20	Valid Instructor No PII	30	Launch Student Resource Link Only
	deployment_id Claim Missing		Launch Instructor No PII		Launch Student Only Resource Link

Test Results: No.1 ~ No.12 (Error Case)

#	Test Name	Error Message	Error Log
1	No KID Sent	pylTi1p3.exception.LtiException: JWT KID not found	"{message: 'An uncaught exception happened while servi
	KID not passed in JWT Header		
2	Incorrect KID Sent	pylTi1p3.exception.LtiException: Unable to find public key	"{message: 'An uncaught exception happened while servi
	Incorrect KID passed in JWT Header		
3	Wrong LTI Version	pylTi1p3.exception.LtiException: Incorrect version, expected 1.3.0	"{message: 'An uncaught exception happened while servi
	LTI version passed is not 1.3		
4	Missing LTI Version	pylTi1p3.exception.LtiException: Incorrect version, expected 1.3.0	"{message: 'An uncaught exception happened while servi
	No LTI version passed in claim/version		
5	Invalid LTI Message	pylTi1p3.exception.LtiException: Invalid id_token, JWT must contain 3 parts	"{message: 'An uncaught exception happened while servi
	Message passed is NOT LTI 1.3 JWT		
6	Missing JWT Fields	pylTi1p3.exception.LtiException: Invalid message type	"{message: 'An uncaught exception happened while servi
	One or more JWT fields missing		
7	JWT Timestamps Invalid	pylTi1p3.exception.LtiException: Can't decode id_token: Signature has expired	"{message: 'An uncaught exception happened while servi
	Exp and lat Fields invalid		
8	Message Type Invalid	pylTi1p3.exception.LtiException: Invalid message type	"{message: 'An uncaught exception happened while servi
	message_type Claim Missing		
9	Role Claims Invalid	pylTi1p3.exception.LtiException: Missing Roles Claim	"{message: 'An uncaught exception happened while servi
	role Claim Missing		
10	Deployment Claim Invalid	pylTi1p3.exception.LtiException: deployment_id is not set in jwt body	"{message: 'An uncaught exception happened while servi
	deployment_id Claim Missing		
11	Launch No resource_link_id	pylTi1p3.exception.LtiException: Missing Resource Link Id	"{message: 'An uncaught exception happened while servi
	Launch With Missing resource_link_id		
12	User Claim Invalid	pylTi1p3.exception.LtiException: Must have a user (sub)	"{message: 'An uncaught exception happened while servi
	user Claim Missing		

Platform Testing Case

- Tests for LTI v1.3 Core:
 - 42 Test Cases
- Tests for Deep Linking:
 - 8 Test Cases
- Tests for Names and Role Provisioning Services
 - 9 Test Cases
- Tests for Assignment and Grade Services
 - 18 Test Cases

LTI 1.3 Core Results

Test Type	Test Name	Test Result
Payload	Student - Get the Full Payload Receive Full Student Payload	NOT RUN
JSON Class	Student - Payload is LTI 1.3 Payload Received is LTI 1.3	NOT RUN
JSON Class	Student - Payload Timestamps Correct Payload Timestamps Correct	Passed
JSON Class	Student - Payload Signing Algorithm Correct Payload Signed with Agreed Algorithm	Passed
JSON Class	Student - Payload Signed Non-Empty Payload JWS Signing Correct	Passed
JSON Class	Student - Payload Complete Payload Contains Required Params	Passed
JSON Class	Student - Payload LTI Version Correct Payload Contains Correct LTI Version	Passed
JSON Class	Student - Payload Roles Correct Payload Roles Are Correct Formats	Passed
JSON Class	Student - Payload Params No Whitespace Payload Params Don't Have Extra Whitespace	Passed
JSON Class	Student - Payload Values Affirmed Payload Values Affirmed Correct	Passed
JSON Class	Student - Payload Values Affirmed Payload Values Affirmed Correct	Passed
Payload	Teacher - Get the Teacher ID Payload Receive Teacher ID Payload	Passed
JSON Class	Teacher - Payload is LTI 1.3 Payload Received is LTI 1.3	Passed
JSON Class	Teacher - Payload Timestamps Correct Payload Timestamps Correct	Passed
JSON Class	Teacher - Payload Signing Algorithm Correct Payload Signed with Agreed Algorithm	Passed
JSON Class	Teacher - Payload Signed Correctly Payload JWS Signing Correct	Passed
JSON Class	Teacher - Payload Complete Payload Contains Required Params	Passed
JSON Class	Teacher - Payload LTI Version Correct Payload Contains Correct LTI Version	Passed
JSON Class	Teacher - Payload Roles Correct Payload Roles Are Correct Formats	Passed
JSON Class	Teacher - All Not Passed Payload Does Not Contain PI	Passed
JSON Class	Teacher - Payload Params No Whitespace Payload Params Don't Have Extra Whitespace	Passed
JSON Class	Teacher - Payload Values Affirmed Payload Values Affirmed Correct	Passed
JSON Class	Teacher - Payload Values Affirmed Payload Values Affirmed Correct	Passed
Payload	Teacher - Get the Full Teacher Payload Receive Full Teacher Payload	Passed
JSON Class	Teacher - Payload is LTI 1.3 Payload Received is LTI 1.3	Passed
JSON Class	Teacher - Payload Timestamps Correct Payload Timestamps Correct	Passed
JSON Class	Teacher - Payload Signing Algorithm Correct Payload Signed with Agreed Algorithm	Passed
JSON Class	Teacher - Payload Signed Correctly Payload JWS Signing Correct	Passed
JSON Class	Teacher - Payload Complete Payload Contains Required Params	Passed
JSON Class	Teacher - Payload LTI Version Correct Payload Contains Correct LTI Version	Passed
JSON Class	Teacher - Payload Roles Correct Payload Roles Are Correct Formats	Passed
JSON Class	Teacher - All Not Passed Payload Does Not Contain PI	Passed
JSON Class	Teacher - Payload Params No Whitespace Payload Params Don't Have Extra Whitespace	Passed
JSON Class	Teacher - Payload Values Affirmed Payload Values Affirmed Correct	Passed
JSON Class	Teacher - Payload Values Affirmed Payload Values Affirmed Correct	Passed

LTI 1.3 Deep Linking Results

Test Type	Test Name	Test Result
Payload	Deep Linking - Get the Payload Receive Deep Linking Payload	NOT RUN
JSON Class	Deep Linking - Payload is LTI 1.3 Payload Received is LTI 1.3	NOT RUN
JSON Class	Deep Linking - Payload Timestamps Correct Payload Timestamps Correct	NOT RUN
JSON Class	Deep Linking - Signing Algorithm Correct Payload Signed with Agreed Algorithm	NOT RUN
JSON Class	Deep Linking - Payload Signed Correctly Payload JWS Signing Correct	NOT RUN
JSON Class	Deep Linking - Payload Complete Payload Contains Required Params	NOT RUN
JSON Class	Deep Linking - Payload LTI Version Correct Payload Contains Correct LTI Version	NOT RUN
Invalid	Deep Linking - Final Absorption Affirmed Deep Linking Affirmed Complete	NOT RUN

LTI 1.3 Names and Roles Results

Test Type	Test Name	Test Result
Payload	Names and Roles - LTI Core Payload Receive Core Payload for Name and Roles	NOT RUN
JSON Class	Names and Roles - Payload is LTI 1.3 Payload Received is LTI 1.3	NOT RUN
JSON Class	Names and Roles - Payload Timestamps Correct Payload Timestamps Correct	NOT RUN
JSON Class	Names and Roles - Payload Signed Correctly Payload JWS Signing Correct	NOT RUN
JSON Class	Names and Roles - Payload Complete Payload Contains Required Params	NOT RUN
OAuth2 Class	Names and Roles - Generate OAuth2 Token Security Credentials Acquisition	NOT RUN
HTTP GET	Names and Roles - Do Request Send Names and Roles GET	NOT RUN
JSON	Names and Roles - Receive Complete Response Contains Required Params	NOT RUN
JSON Header	Names and Roles - Confirm Link Data Confirm Link Data Header	NOT RUN

LTI 1.3 Assignments and Grades Results

Test Type	Test Name	Test Result
Payload	Assignments Grades - LTI Core Payload 1 Get Student Payload LTI 1.3	NOT RUN
JSON Class	Assignments Grades - Payload Signed Correctly Payload JWS Signing Correct	NOT RUN
JSON Class	Assignments Grades - Payload Complete Payload Contains Required Params	NOT RUN
OAuth2 Class	Assignments Grades - Get LineItem OAuth2 Security Credentials Acquisition	NOT RUN
JSON	Assignments Grades - Create LineItem 1 Create First Line Item	NOT RUN
JSON	Assignments Grades - GET LineItem 1 Full First Line Item	NOT RUN
JSON	Assignments Grades - Create LineItem 2 Create Second Line Item	NOT RUN
Payload	Assignments Grades - LTI Core Payload 2 Get Student Payload LTI 1.3	NOT RUN
JSON Class	Assignments Grades - Payload Signed Correctly Payload JWS Signing Correct	NOT RUN
JSON Class	Assignments Grades - Payload Complete Payload Contains Required Params	NOT RUN
JSON	Assignments Grades - Create LineItem 3 Create Third Line Item	NOT RUN
OAuth2 Class	Assignments Grades - Get Score OAuth2 Security Credentials Acquisition	NOT RUN
JSON	Assignments Grades - Push Score LineItem 3 Set Score For Line Item 3	NOT RUN
JSON	Assignments Grades - Push Score Line Item 1 Set Score For Line Item 1	NOT RUN
OAuth2 Class	Assignments Grades - Get Result OAuth2 Security Credentials Acquisition	NOT RUN
JSON	Assignments Grades - GET Result Line Item 3 GET Result Line Item 3	NOT RUN
JSON	Assignments Grades - GET Result Line Item 1 GET Result Line Item 1	NOT RUN
Invalid	Assignments Grades - Confirm Gradebook Confirm Gradebook Entries	NOT RUN

Platform Core Test Cases: 42 Success

Test Type	Test Name	Test Type	Test Name	Test Type	Test Name	Test Type	Test Name
Payload	Student - Get the Full Payload Receive Full Student Payload	Payload	Student - Get the Student UID Payload Receive Student UID Payload	Payload	Teacher - Get the Full Teacher Payload Receive Full Teacher Payload	Payload	Teacher - Get the Teacher UID Payload Receive Teacher UID Payload
JSON Claim	Student - Payload is LTI 1.3 Payload Received is LTI 1.3	JSON Claim	Student - Payload is LTI 1.3 Payload Received is LTI 1.3	JSON Claim	Teacher - Payload is LTI 1.3 Payload Received is LTI 1.3	JSON Claim	Teacher - Payload is LTI 1.3 Payload Received is LTI 1.3
JSON Claim	Student - Payload Timestamps Correct Payload Timestamps Correct	JSON Claim	Student - Payload Timestamps Correct Payload Timestamps Correct	JSON Claim	Teacher - Payload Timestamps Correct Payload Timestamps Correct	JSON Claim	Teacher - Payload Timestamps Correct Payload Timestamps Correct
JSON Claim	Student - Payload Signing Algorithm Correct Payload Signed with Agreed Algorithm	JSON Claim	Student - Payload Signing Algorithm Correct Payload Signed with Agreed Algorithm	JSON Claim	Teacher - Payload Signing Algorithm Correct Payload Signed with Agreed Algorithm	JSON Claim	Teacher - Payload Signing Algorithm Correct Payload Signed with Agreed Algorithm
JSON Claim	Student - Payload Signed Correctly Payload JWT Signing Correct	JSON Claim	Student - Payload Signed Correctly Payload JWT Signing Correct	JSON Claim	Teacher - Payload Signed Correctly Payload JWT Signing Correct	JSON Claim	Teacher - Payload Signed Correctly Payload JWT Signing Correct
JSON Claim	Student - Payload Complete Payload Contains Required Params	JSON Claim	Student - Payload Complete Payload Contains Required Params	JSON Claim	Teacher - Payload Complete Payload Contains Required Params	JSON Claim	Teacher - Payload Complete Payload Contains Required Params
JSON Claim	Student - Payload LTI Version Correct Payload Contains Correct LTI Version	JSON Claim	Student - Payload LTI Version Correct Payload Contains Correct LTI Version	JSON Claim	Teacher - Payload LTI Version Correct Payload Contains Correct LTI Version	JSON Claim	Teacher - Payload LTI Version Correct Payload Contains Correct LTI Version
JSON Claim	Student - Payload Roles Correct Payload Roles Are Correct Formats	JSON Claim	Student - Payload Roles Correct Payload Roles Are Correct Formats	JSON Claim	Teacher - Payload Roles Correct Payload Roles Are Correct Formats	JSON Claim	Teacher - Payload Roles Correct Payload Roles Are Correct Formats
JSON Claim	Student - Payload Params No Whitespace Payload Values Don't Have Extra Whitespace	JSON Claim	Student - PII Not Passed Payload Does Not Contain PII	JSON Claim	Teacher - Payload Params No Whitespace Payload Values Don't Have Extra Whitespace	JSON Claim	Teacher - PII Not Passed Payload Does Not Contain PII
JSON Claim	Student - Payload Values Affirmed Payload Values Affirmed Correct	JSON Claim	Student - Payload Params No Whitespace Payload Values Don't Have Extra Whitespace	JSON Claim	Teacher - Payload Values Affirmed Payload Values Affirmed Correct	JSON Claim	Teacher - Payload Params No Whitespace Payload Values Don't Have Extra Whitespace
		JSON Claim	Student - Payload Values Affirmed Payload Values Affirmed Correct			JSON Claim	Teacher - Payload Values Affirmed Payload Values Affirmed Correct

Results / Previous Test / Next Test

Section: LTI Core Total Test % Done: 2

Previous Test
Next Test
Results

Test Description: KID not passed in JWT Header

Test Verifies KID Required in Header

Test Status: PASSED

Test Options

Test Payload
Test Results

Choose User for Test

Student ▾

See Payload
Submit Test

Submit Results

LTI 1.3 Core Results

Test Type	Test Name	Test Result
JSON Claim	No KID Sent KID not passed in JWT Header	Passed
JSON Claim	Incorrect KID Sent Incorrect KID passed in JWT Header	NOT RUN
JSON Claim	Wrong LTI Version LTI version passed is not 1.3	NOT RUN
JSON Claim JSON Claim	Missing LTI Version No LTI version passed in claim/version Incorrect KID passed in JWT Header	NOT RUN
JSON Claim	Wrong LTI Version LTI version passed is not 1.3	NOT RUN
JSON Claim	Missing LTI Version No LTI version passed in claim/version	NOT RUN
JSON Claim	Invalid LTI Message Message passed is NOT LTI 1.3 JWT	NOT RUN
JSON Claim	Missing JWT Fields One or more JWT fields missing	NOT RUN

Please Select "Test Options" Above to Run the Test

テストケースの実行ステップ

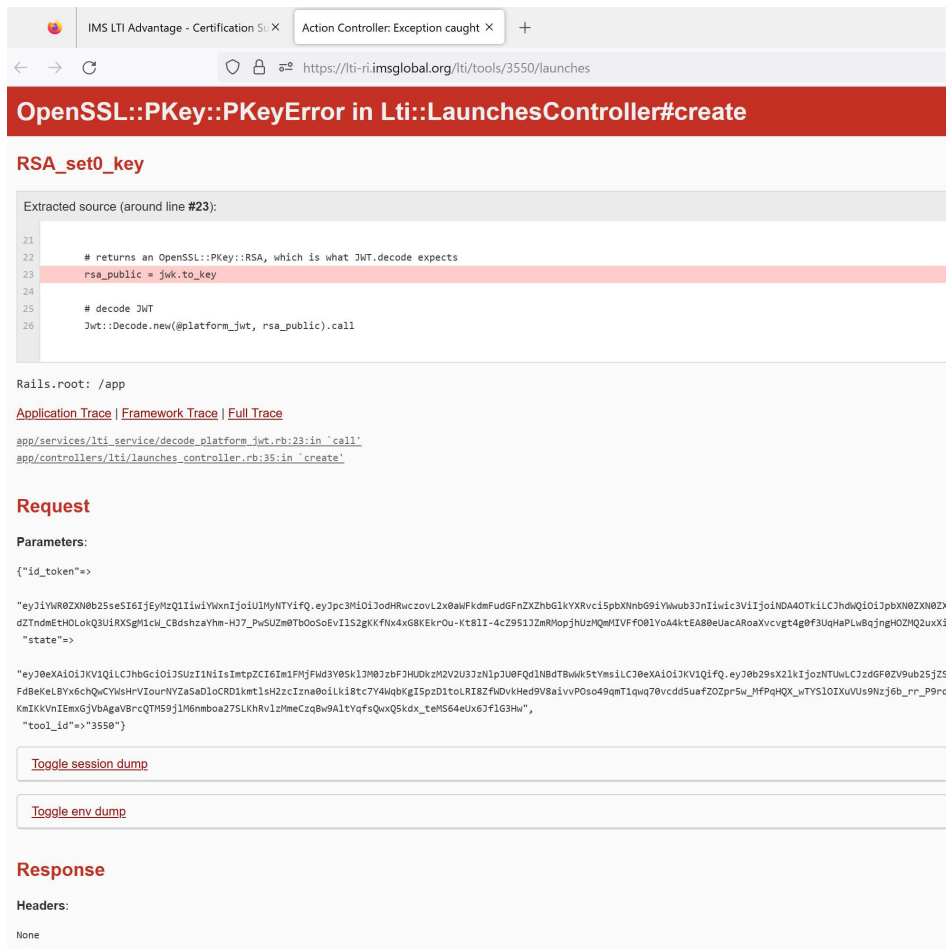
- Test Option
- (See Payload)
- Submit Test
- Submit Log or エビデンス画面
- Next Test
- Previous Test
- Result
- 全ての項目をPassedにする

[Submit Results](#)

LTI 1.3 Core Results

Test Type	Test Name	Test Result
JSON Claim	No KID Sent KID not passed in JWT Header	Passed
JSON Claim	Incorrect KID Sent Incorrect KID passed in JWT Header	NOT RUN
JSON Claim	Wrong LTI Version LTI version passed is not 1.3	NOT RUN
JSON Claim	Missing LTI Version No LTI version passed in claim/version	NOT RUN
JSON Claim	Invalid LTI Message Message passed is NOT LTI 1.3 JWT	NOT RUN
JSON Claim	Missing JWT Fields One or more JWT fields missing	NOT RUN

Test Description: KID not passed in JWT Header



OpenSSL::PKey::PKeyError in Lti::LaunchesController#create

Test Options | **Test Payload** | **Test Results**

Submit Result Log From Your Tool Logs

Please Insert Your Log Messages Demonstrating Success or Failure:

`OpenSSL::PKey::PKeyError in Lti::LaunchesController#create`

Submit Log

If You Are Unable To Retrieve Log Messages

Upload Your Screenshot Of The Tool Running To Indicate **SUCCESS ONLY**:

参照... ファイルが選択されていません。

Submit Screenshot

If Your Testing Shows a Failure For This Test, Please Input Message in the the Log Above and Set the Switch to OFF

https://lti-ri.imsglobal.org/lti/tools/3550/launches/26854

The screenshot shows a web browser window displaying the IMS GLOBAL LTI-RI interface. The main content area is titled "Successful Launch." and "Launch Status". A yellow dashed box highlights the "Valid" status and the message "Launch was successfully received by Reference Tool." Below this, it indicates "0 Errors below." and "0 Warnings below." The JWT token is displayed as a long string of characters.

The interface includes several diagnostic panels:

- JWT Decode + Authorization:** Shows a "Success" message: "JWT was decoded correctly with the kid (Key ID) and public key provided by the Platform."
- Missing Required Attributes:** Shows a message: "Following attributes are required but were not sent:" followed by a list containing "• No Missing Attributes".
- Warnings:** This panel is currently empty.
- Pre-fetched OAuth2 Access Token:** Displays a JSON object:


```
{
    "access_token": "01EDE0EC1BD04561BD00D36B0F17B7FD9E07F3A297A9ED472",
    "token_type": "bearer",
    "expires_in": 3600,
    "scope": "https://purl.imsglobal.org/spec/lti-ags/scope/lineitem https://purl.imsglobal"
  }
```
- OIDC State:** Displays a long string of characters: "eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsImtpZCI6Im1FMjFwZD3Y0Sk1JM0JzbnJpJ080Q".
- JWT Header:** This panel is currently empty.

Submit Log

Test Description: Launch LTI 1.3 Message as Instructor

Test Sends Valid Instructor Launch

Test Status: PASSED

Test Options Test Payload **Test Results**

Submit Result Log From Your Tool Logs

Test Passed?

Please Insert Your Log Messages Demonstrating Success or Failure:

Successful Launch.
Launch Status

Valid

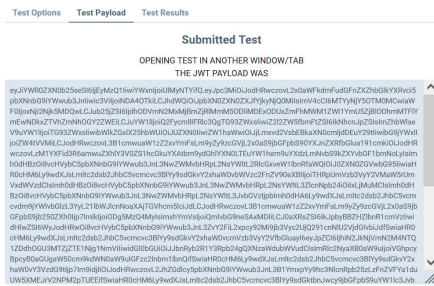
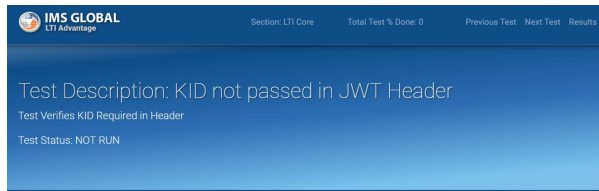
Launch was successfully received by Reference Tool.

0 Errors below.

Submit Log

JSON Claim	Deployment Claim Invalid deployment_id Claim Missing	NOT RUN
JSON Claim	Launch No resource_link_id Launch With Missing resource_link_id	NOT RUN
JSON Claim	User Claim Invalid user Claim Missing	NOT RUN
JSON Claim	Valid Instructor Launch Launch LTI 1.3 Message as Instructor	<input checked="" type="checkbox"/> Passed
JSON Claim	Valid Instructor Launch with Roles Launch Instructor with Multiple Role Values	NOT RUN
JSON Claim	Valid Instructor Launch Short Role Launch Instructor with Short Role Value	NOT RUN

pylti1p3.exception.LtiException: JWT KID not found



Decoded

HEADER: ALGORITHM & TOKEN TYPE
<pre>{ "badtestonly": "12345", "alg": "RS256" }</pre>
PAYLOAD: DATA
<pre>{ "iss": "https://ltiadvantagevalidator.imsglobal.org", "sub": "408999", "aud": "imstester_b926442", "exp": "1626699348", "iat": "1626699048", "nonce": "7a85f7c120ff4e2c989b011851faa1c5eb5be9f0e88f11eb40491e5afca8f6ea", "name": "Carrie Test Lowell", "given_name": "Carrie", "family_name": "Lowell", "middle_name": "Test", }</pre>

```
{'message': 'An uncaught exception happened while servicing this request. You can investigate this with the `zappa tail` command.', 'traceback': [Traceback (most recent call last):\n, ' File \"/var/task/handler.py", line 540, in handler\n with Response.from_app(self.wsgi_app, environ) as response:\n, ' File \"/var/task/werkzeug/wrappers/base_response.py", line 287, in from_app\n return cls(*_run_wsgi_app(app, environ, buffered))\n, ' File \"/var/task/werkzeug/test.py", line 1096, in run_wsgi_app\n app_rv = app(environ, start_response)\n, ' File \"/var/task/zappa/middleware.py", line 55, in __call__\n response = self.application(environ, encode_response)\n, ' File \"/var/task/flask/app.py", line 2464, in __call__\n return self.wsgi_app(environ, start_response)\n, ' File \"/var/task/app.py", line 33, in __call__\n return self.app(environ, start_response)\n, ' File \"/var/task/flask/app.py", line 2450, in wsgi_app\n response = self.handle_exception(e)\n, ' File \"/var/task/flask/app.py", line 1867, in handle_exception\n raise(exc_type, exc_value, tb)\n, ' File \"/var/task/flask/_compat.py", line 39, in raise\n raise value\n, ' File \"/var/task/flask/app.py", line 2447, in wsgi_app\n response = self.full_dispatch_request()\n, ' File \"/var/task/flask/app.py", line 1952, in full_dispatch_request\n rv = self.handle_user_exception(e)\n, ' File \"/var/task/flask/app.py", line 1821, in handle_user_exception\n raise(exc_type, exc_value, tb)\n, ' File \"/var/task/flask/_compat.py", line 39, in raise\n raise value\n, ' File \"/var/task/flask/app.py", line 1950, in full_dispatch_request\n rv = self.dispatch_request()\n, ' File \"/var/task/flask_debugtoolbar/_init_.py", line 125, in dispatch_request\n return view_func(*req.view_args)\n, ' File \"/var/task/app.py", line 174, in launch\n message_launch_data = message_launch.get_launch_data()\n, ' File \"/var/task/pylti1p3/message_launch.py", line 437, in get_launch_data\n return self.get_jwt_body()\n, ' File \"/var/task/pylti1p3/message_launch.py", line 290, in get_jwt_body\n self.validate()\n, ' File \"/var/task/pylti1p3/message_launch.py", line 1867, in validate\n return self.validate_state()\n, ' File \"/var/task/pylti1p3/message_launch.py", line 275, in validate\n return self.validate_state()\n, ' File \"/var/task/pylti1p3/message_launch.py", line 614, in validate_jwt_signature\n public_key = self.get_public_key()\n, ' File \"/var/task/pylti1p3/message_launch.py", line 512, in get_public_key\n raise LtiException("JWT KID not found")\n]\n, 'pylti1p3.exception.LtiException: JWT KID not found']}]"
```



トライアル

- RI Team「DA-LTI-Training TestSuit」に参加する
- (1) TS Tool Testing (RI Toolをテストする)
 - プロファイル入力{Product Type: Tool}
 - RI Tool 作成
 - TSのTool情報に作成したRI Tool情報を入力
 - テストケース実施
- (2) TS Platform Testing (RI Platformをテストする)