



# REST APIs to integrate with Mettl

**Document Version** v1.19  
**Document Release Date** January 21, 2015  
**Change Log** New API to [Create an Assessment](#)  
Set Test Grade Email Notification Recipients in [Create/Edit](#) Schedule APIs

Please contact us on [support@mettl.com](mailto:support@mettl.com) for any queries.

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# 1 README

Welcome to Mettl APIs. This document details REST based Mettl APIs using which the API consumer can integrate with Mettl application.

## 1.1 Pre-requisites for using Mettl APIs

The API consumer (who-so-ever wants to use Mettl APIs) should have a valid **Mettl account** and should be familiar with **Mettl's terminologies** (for example, assessment, schedule, questions, candidates, results, reports etc). It is highly recommended that you know the following operations on Mettl before using these APIs –

1. How to create Assessments
2. How to schedule Assessments & Invite Candidates
3. How to view Results of a particular assessment
4. How to manage candidates & batches
5. Take a demo test on Mettl.com to see Test Taker's experience (here is a demo test – <http://mettl.com/demo-test>)

Please refer to our complete documentation on <http://support.mettl.com> to know more about these operations. You would also need a pair of **Public and Private Keys** to use our APIs. Please contact your **Account/Sales Manager** at Mettl to get these keys or **send an email to [support@mettl.com](mailto:support@mettl.com)**. Please note that only organizations with prior permission can use Mettl APIs. [Security and Authentication](#) section explains where Public & Private keys are used in Mettl APIs.

## 1.2 What can be done using Mettl APIs

Using Mettl APIs mentioned in this document the API consumer can achieve the following –

1. Create a new assessment,
2. Fetch details of assessments, schedules from their Mettl account & show on their portal,
3. Allow candidates to view available tests, start & take test from their portal,
4. Fetch information about candidate's test states – started, active, idle, expired, complete,
5. Fetch results & reports of tests taken by candidates,
6. Create Schedule for a particular Assessment (Get **notifications** on test start, end, expired-resume, result completion events asynchronously)
7. Delete the test details/results for a candidate for completed/expired tests.

## 1.3 What cannot be done using Mettl APIs

Please note that the following activities **cannot be done through APIs** and need to be done on Mettl website –

1. Question creation, Candidate management
2. Candidate registration field management
3. Take test (i.e. candidates will attempt the test on Mettl window only, however, they can choose & start test from client's portal)

## 1.4 Is there any sample application?

Please refer to the last section of this document for a [Sample application](#) that can be developed with API integration.

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## 2 Account APIs

### 2.1 Fetch Mettl Account Information

Request URL	http://api.mettl.com/v1/account				
Method	GET				
Arguments	<b>Name</b>	<b>Mandatory</b>	<b>Default</b>	<b>Allowed Values</b>	<b>Description</b>
	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a> section
	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs
	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a> section
	languageCode	No	en	en, es and ar	Registration fields can be defined in different languages. So the returned registration fields are in the language passed. en -> English es -> Spanish ar -> Arabic
<p><b>Example:</b>            API Request: http://api.mettl.com/v1/account?ak={xxxxxxxxxxxx}&amp;asgn={xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx}&amp;ts=1365740665&amp;languageCode=en            Output: JSON containing account level details such as account's Email ID, First Name, Last Name, Account Type, Logo link, Registration Fields</p>					
Response	<pre>{   "status": "SUCCESS",   "accountInfo": {     "email": "john.doe@nextbigapp.com",     "firstName": "John Doe",     "lastName": null,     "accountType": "Enterprise",     "logoPath": "http://mettl.com/logo/1312.png",     "whiteLabelInfo": { "headerBackgroundColor": null, </pre>				

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```
        "headerFontColor":null,  
        "buttonColor":null,  
        "buttonFontColor":null,  
        "customTestUrl":null,  
        "cssPath":"//mettl.com/clientTheme/null",  
        "faviconPath":"//mettl.com/favicon/null",  
        "backgroundImagePath":"//mettl.com/testBackground/null",  
        "supportNumbers":["+91 1203456789"]  
    }  
  
    "registrationFields":[{"name":"Email Address","type":"TextBox","required":true,"validate":true},  
                        {"name":"First Name","type":"TextBox","required":true,"validate":false},  
                        {"name":"test","type":"TextBox","required":true,"validate":false}]  
    }  
}
```

## 2.2 Logo Upload in Account

Note: Do not use logo for [Signature Generation](#).

Request URL	http://api.mettl.com/v1/account/upload-logo										
Request Method	POST										
Arguments	<b>Name</b>	<b>Mandatory</b>	<b>Default</b>	<b>Allowed Values</b>	<b>Description</b>						
	logo	Yes	-	Multipart file	Logo appears on top left of the screen. <ul style="list-style-type: none"> <li>Accepted logo formats: jpeg, jpg, png and gif</li> <li>Maximum logo size: 100 Kb</li> <li>Recommended size: 160x60px</li> </ul>						
	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to " <a href="#">Security and Authentication</a> "						
	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs						
	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to " <a href="#">Security and Authentication</a> "						
	<p><b>Example:</b>  API Request: http://api.mettl.com/v1/account/upload-logo  Post Parameters: ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx}</p> <p>Output: Success/failure response for logo upload is returned.</p>										
Response	JSON containing success/failure response for logo upload <pre>{ "status": "SUCCESS", }</pre>										
<p><b>If the request is invalid, the response will be:</b>  <pre>{ "status": "error", "error": { "code": Error-Code , "message": Error-Message }}</pre></p> <p>The following are the error codes specific to this API :</p> <table border="1" data-bbox="858 1240 1478 1425"> <thead> <tr> <th>Error-Code</th> <th>Error-Message</th> </tr> </thead> <tbody> <tr> <td>E013</td> <td>File Size Exceeded for Logo</td> </tr> <tr> <td>E014</td> <td>Invalid file format &lt;format&gt; for logo</td> </tr> </tbody> </table> <p><a href="#">For the mapping of common error-codes and messages, see "Error Handling"</a>.</p>						Error-Code	Error-Message	E013	File Size Exceeded for Logo	E014	Invalid file format <format> for logo
Error-Code	Error-Message										
E013	File Size Exceeded for Logo										
E014	Invalid file format <format> for logo										

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## 2.3 White labelling Settings in Account

Using this API, clients can customize the test experience of your candidates.

### NOTE:

- Only authorized users can use this API. In order to use this API please contact your Account Manager.
- Do not use Favicon and background image for [Signature Generation](#).

Request URL	http://api.mettl.com/v1/ <b>account/update-white-labeling</b>				
Request Method	POST				
Arguments	<b>Name</b>	<b>Mandatory</b>	<b>Default</b>	<b>Allowed Values</b>	<b>Description</b>
	wl	Yes	-	JSON formatted String as specified below	Details required for customization of candidate's test experience.
	fav	No	-	Multipart file	Icon(favicon) which appears on the browser tab <ul style="list-style-type: none"> <li>• Accepted logo formats: png and ico</li> <li>• Maximum logo size: 10 Kb</li> <li>• Recommended size: 8x8px</li> </ul>
	cov	No	-	Multipart file	Cover image <ul style="list-style-type: none"> <li>• Accepted logo formats: jpeg, jpg, png and gif</li> <li>• Maximum logo size: 2 Mb</li> <li>• Recommended size: 1920x1080px</li> </ul>
	sn	No	-	JSON formatted string as specified below	Customized support numbers as list which can accept maximum of two numbers and minimum of one
	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to " <a href="#">Security and Authentication</a> "
	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs
	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to " <a href="#">Security and Authentication</a> "

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	<p><b>Example:</b> API Request: <a href="http://api.mettl.com/v1/account/update-white-labeling">http://api.mettl.com/v1/account/update-white-labeling</a></p> <p>Post Parameters:  <code>wl={see-sample-below}&amp;ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xx}</code></p> <p>wl={  "headerBackgroundColor": ab12345 // Provide valid hash code  "headerFontColor": ffffff // Provide valid hash code  "buttonColor": ef75ab // Provide valid hash code  "buttonFontColor": ffffff // Provide valid hash code  "customTestUrl": xyxyxy // Custom test URL formed would be: <a href="https://tests.mettl.com/authenticateKey/xyxyxy">https://tests.mettl.com/authenticateKey/xyxyxy</a>  }  }</p> <p>For adding two support numbers: <code>sn = ["+1-650-924-9221", "+91-82878-0340"]</code>  For adding one support number: <code>sn = ["+1-650-924-9221"]</code></p> <p>This would be an invalid request  <code>sn = []</code></p> <p>Output:  Response for success/failure is returned.</p>												
Response	JSON stating success/failure												
	<pre>{ "status": "SUCCESS" }</pre>												
	<p><b>If the request is invalid, the response will be:</b>  <code>{"status": "error", "error": {"code": Error-Code, "message": Error-Message}}</code></p> <p>The following are the error codes specific to this API :</p> <table border="1" data-bbox="751 1057 1587 1425"> <thead> <tr> <th>Error-Code</th> <th>Error-Message</th> </tr> </thead> <tbody> <tr> <td>E013</td> <td>File Size Exceeded for (Favicon/Cover Image)</td> </tr> <tr> <td>E014</td> <td>Invalid file format &lt;format&gt; for (Favicon/Cover image)</td> </tr> <tr> <td>E015</td> <td>Invalid (Header/Header Text/Background/Background Text) Color</td> </tr> <tr> <td>E016</td> <td>Invalid Support Number(s)</td> </tr> <tr> <td>E017</td> <td>Invalid Support Number count</td> </tr> </tbody> </table> <p><a href="#">For the mapping of common error-codes and messages, see "Error Handling".</a></p>	Error-Code	Error-Message	E013	File Size Exceeded for (Favicon/Cover Image)	E014	Invalid file format <format> for (Favicon/Cover image)	E015	Invalid (Header/Header Text/Background/Background Text) Color	E016	Invalid Support Number(s)	E017	Invalid Support Number count
Error-Code	Error-Message												
E013	File Size Exceeded for (Favicon/Cover Image)												
E014	Invalid file format <format> for (Favicon/Cover image)												
E015	Invalid (Header/Header Text/Background/Background Text) Color												
E016	Invalid Support Number(s)												
E017	Invalid Support Number count												

### 3 PBT APIs

#### 3.1 Retrieve list of All PBTs available with Mettl

Request URL	http://api.mettl.com/v1/pbts																								
Method	GET																								
Arguments	<table border="1"> <thead> <tr> <th>Name</th> <th>Mandatory</th> <th>Default</th> <th>Allowed Values</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ts</td> <td>Yes</td> <td>-</td> <td>current time-stamp</td> <td>For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a></td> </tr> <tr> <td>ak</td> <td>Yes</td> <td>-</td> <td>Client's API key</td> <td>Unique API Key is assigned to the client on registering for using Mettl APIs</td> </tr> <tr> <td>asgn</td> <td>Yes</td> <td>-</td> <td>Generated request signature</td> <td>For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a></td> </tr> </tbody> </table>					Name	Mandatory	Default	Allowed Values	Description	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>
	Name	Mandatory	Default	Allowed Values	Description																				
ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>																					
ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs																					
asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>																					
	<p><b>Example:</b>  API Request: http://api.mettl.com/v1/pbts?ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx}</p> <p>Output:  Returns list of the PBTs available with Mettl.</p>																								
Response	JSON containing list of PBTs available with Mettl.																								
	<p>Sample response data –</p> <pre>{   "status": "SUCCESS",   "pbts": [     {       "pbtId": 109,       "name": "Mettl Leadership Attributes Assessment",       "price": 10,       "description": "&lt;h2&gt;Used for recruitment and selection:&lt;/h2&gt;\n\n&lt;p&gt;The difference between success and failure of a business unit or organization is often dependent on the leadership. It is often confused with extraversion and is hard to judge objectively. This assessment helps organizations in identifying a leader's strengths and develop breakthrough leadership by mapping to four functions critical to leadership effectiveness in an organization: leading change, leading people, result driven, building coalition, along with 19 competencies...&lt;/p&gt;",       "heroMessage": "Identify and analyze leadership potentialIdentify candidate's Leadership Traits",     }   ] }</pre>																								

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	<pre> "keywords": "psychometric,tests,leadership,attributes,assessment", "sampleReportUrl": "https://mettl.com/corporate/analytics/share-report?key=uMoEMNWfD%2FrCnf4IWXRw%3D%3D", "releventIndustries": "infotech,ites,fmcg,bfs,insurance,hospitality,retails,manufacturing,healthcare" }, {   "pbtlId": 113,   "name": "Mettl Cognitive Abilities Assessment",   "price": 10,   "description": "&lt;p&gt;The test measures two skills: critical thinking and abstract reasoning .&lt;/p&gt;\n\n&lt;p&gt;1. The critical thinking section checks for problem solving ability and sound judgement.&amp;nbsp;&lt;/p&gt;\n\n&lt;p&gt;2.The factors that are measured to get an overall score on critical thinking are recognition of assumptions, evaluation of arguments and drawing conclusions.&lt;/p&gt;\n\n&lt;p&gt;2.The abstract reasoning section checks if the person can identify logical patterns and relationships among events, situations or ideas and apply this knowledge to strategically solve work-related problems.&lt;/p&gt;\n\n&lt;p&gt;Here is a look at a &lt;a href=\"http://mettl.com/corporate/analytics/share-report?key=VhoSHZ%2Fd6EY%2BOQK1pnU8cg%3D%3D\"&gt;sample report&lt;/a&gt;&lt;/p&gt;",   "heroMessage": "Filter good strategic thinkers",   "keywords": "",   "sampleReportUrl": "",   "releventIndustries": "" }, ... ... ... ] } </pre>
	<p><b>If the request is invalid, the response will be:</b></p> <pre> { "status": "error",   "error": { "code": Error-Code,             "message": Error-Message }} </pre> <p><a href="#">For the mapping of common error-codes and messages, see "Error Handling".</a></p>

### 3.2 Add list of PBTs to Account

Request URL	http://api.mettl.com/v1/pbts/add				
Request Method	POST				
Arguments	<b>Name</b>	<b>Mandatory</b>	<b>Default</b>	<b>Allowed Values</b>	<b>Description</b>
	pbts	Yes	-	JSON formatted String as specified below	List containing pbt ids to be added in the account
	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>
	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs
	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>
	<p><b>Example:</b>            API Request: http://api.mettl.com/v1/pbts/add            Post Parameters:            pbts={see-sample-below}&amp;ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xx}</p> <p>pbts=[10,12]</p> <p><b>Output:</b>            Response associated with list of pbts added/not added as assessments is returned.</p>				
Response	JSON containing list of pbts added/not added as assessments.				
	<pre>{   "status": "SUCCESS",   "pbts": [     {       "pbtId": 10,       "added": true,       "message": null,       "assessmentId": 3455     },     {</pre>				

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	<pre>"pbtId": 12, "added": false, "message": "Invalid Pbt Id", "assessmentId": 0 } ] }</pre>
	<p><b>If the request is invalid, the response will be:</b> { "status": "error", "error" : { "code": Error-Code , "message": Error-Message } } <a href="#">For the mapping of common error-codes and messages, see "Error Handling".</a></p>

## 4 Assessment APIs

### 4.1 Create an Assessment

Request URL	http://api.mettl.com/v1/assessments				
Method	POST				
Arguments	<b>Name</b>	<b>Mandatory</b>	<b>Default</b>	<b>Allowed Values</b>	<b>Description</b>
	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>
	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs
	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>
	assessments	Yes	-	JSON formatted String as specified below	All the details required to create the desired new assessment.
<p><b>Example:</b>  API Request: http://api.mettl.com/v1/assessments</p> <p>Post Parameters:  assessments={see-sample-below}&amp;ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx}</p> <pre> assessments : [ {   "name": "UniqueName" //Mandatory, name should be unique   , "duration" : "80" //Integer value to be entered. Value will be considered in minutes.   , "instructions": As a string   , "allowCopyPaste" : false //true or false   , "exitRedirectionURL" : URL //Once candidate completes the test, (s)he will be redirected here; Should be a valid URL   , "showReportToCandidateOnExit" : false   , "onScreenCalculator" : false   , "sections" : [ //Mandatory to specify sectional details     {       "name" : unique name within an assessment //Unique name is mandatory     }   ] } ] </pre>					

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	<pre> , "duration" : In case of timed section specify value, else give null/don't send this property , "instructions" : As a string , "allQuestionsMandatory" : true , "randomizeQuestions" : true , skills : [     //Mandatory     {         "name" : //Skill should exist in your question bank         , "level" : easy or medium or difficult //One of         , "questionCount" : int validation         , "questionPooling" : true //Randomization         , "questionType" : Alltype         //Possible question types: AllType or MCQ, CODE, FITB, LONG_ANSWER, MCA, SQL, SHORT_ANSWER, CS, CP, FES, TS, FU         , "correctGrade" : double validation //Should be greater than zero         , "incorrectGrade" : double validation //Non-mandatory     } ] } ] } </pre> <p>Output: assessment ID of the created assessment.</p>
Response	Assessment ID of the created assessment
	<p>Sample response data –</p> <pre> { status=SUCCESS, assessmentId=62442 } </pre>

If the the request is invalid, the response will be:

```
{ "status": "error",
  "error": { "code": Error-Code , "message": Error-Message } }
```

The following are the error codes specific to this API :

Error-Code	Error-Message
E701	Invalid assessment name provided (cannot be empty, contain special characters such as \",<,>, ,?,*,\ or be the same as an existing assessment name)
E702	Invalid assessment duration - does match total of individual section durations.
E703	Invalid section durations - provide all or none of the section durations for timed/un-timed sections.
E704	Missing assessment duration as all sections are un-timed.
E705	In section {section-name}, the added skill {skill-name} doesn't exist in your question bank.
E706	In section {section-name}, questiontype {question-type} doesn't exists in skill {skill-name} of your question bank.
E707	In section {section-name}, difficulty level {difficulty-level} of skill {skill-name} doesn't exists in your question bank.
E708	In section {section-name}, no of questions in skill {skill-name}, difficulty level {difficulty-level}, questiontype {question-type} exceeds that in your question bank.
E709	Overlap in section {section-name} and Section {section-name} Questions in some sections are overlapping, might lead to occurrence of same question more than once.
E710	In section {section-name}, there are no questions present in skill {skill-name}.
E789	Invalid value provided.
E789	Invalid grade value for correct grade - {section-name} {skill-name} {difficulty-level} {question-type}, greater than 0.
E789	Invalid grade value for incorrect grade - {section-name} {skill-name} {difficulty-level} {question-type}, should be less than or equal to 0.
E789	Invalid redirection URL
E789	In section {section-name}, same skill with same difficulty level has been added - {skill-name} {difficulty-level}

[For the mapping of common error-codes and messages, see "Error Handling".](#)



## 4.2 Get all Assessments

Request URL	http://api.mettl.com/v1/assessments																																												
Method	GET																																												
Arguments	<table border="1"> <thead> <tr> <th>Name</th> <th>Mandatory</th> <th>Default</th> <th>Allowed Values</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>limit</td> <td>No</td> <td>20</td> <td>Integers [0 to 100]</td> <td>Number of assessments to fetch</td> </tr> <tr> <td>offset</td> <td>No</td> <td>0</td> <td>Integers (max# of assmns)</td> <td>Return number of assessments starting from offset</td> </tr> <tr> <td>sort</td> <td>No</td> <td>createdAt</td> <td>createdAt, testTaken, name</td> <td>Sorting scheme chosen while returning assessments</td> </tr> <tr> <td>sort_order</td> <td>No</td> <td>desc</td> <td>asc, desc</td> <td>Ascending or Descending order of sorting</td> </tr> <tr> <td>ts</td> <td>Yes</td> <td>-</td> <td>current time-stamp</td> <td>For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a></td> </tr> <tr> <td>ak</td> <td>Yes</td> <td>-</td> <td>Client's API key</td> <td>Unique API Key is assigned to the client on registering for using Mettl APIs</td> </tr> <tr> <td>asgn</td> <td>Yes</td> <td>-</td> <td>Generated request signature</td> <td>For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a></td> </tr> </tbody> </table>	Name	Mandatory	Default	Allowed Values	Description	limit	No	20	Integers [0 to 100]	Number of assessments to fetch	offset	No	0	Integers (max# of assmns)	Return number of assessments starting from offset	sort	No	createdAt	createdAt, testTaken, name	Sorting scheme chosen while returning assessments	sort_order	No	desc	asc, desc	Ascending or Descending order of sorting	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>				
	Name	Mandatory	Default	Allowed Values	Description																																								
	limit	No	20	Integers [0 to 100]	Number of assessments to fetch																																								
	offset	No	0	Integers (max# of assmns)	Return number of assessments starting from offset																																								
	sort	No	createdAt	createdAt, testTaken, name	Sorting scheme chosen while returning assessments																																								
	sort_order	No	desc	asc, desc	Ascending or Descending order of sorting																																								
	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>																																								
	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs																																								
	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>																																								
<b>Example:</b>																																													
API Request: http://api.mettl.com/v1/assessments?limit=5&ts=1365740665&ak={xxxxxxxxxxxx}&asgn={xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx}																																													
Output: sorts all assessments by creation Date & returns first 5.																																													
Response	JSON containing list of assessments in client's account																																												
	<p>Sample response data –</p> <pre>{   "status": "SUCCESS",   "assessments": [     {       "id": 4105,       "duration": 90,       "name": "DATABASE",       "instructions": ""     }   ] }</pre>																																												

[Scroll to Top](#)

```

"allowCopyPaste": false,
"exitRedirectionURL": "",
"showReportToCandidateOnExit": false,
"onScreenCalculator": false,
"createdAt": "Mon, 30 Apr 2012 12:16:45 GMT",
"maxMarks": 0,
"markingScheme": "FIXED",
"sections": [
  {
    "name": "Section #3",
    "instructions": "",
    "duration": 30,
    "isTimed": false,
    "skills": [
      {
        "name": "SQL TEST",
        "level": "DIFFICULT",
        "questionCount": 3,
        "source": "Custom",
        "questionType": null,
        "duration": 30,
        "correctGrade": 1,
        "incorrectGrade": 0
      }
    ]
  }
],
"registrationFields": [
  {
    "name": "Email Address",
    "type": "TextBox",
    "required": true,
    "validate": false
  },
  {
    "name": "First Name",
    "type": "TextBox",
    "required": true,
    "validate": false
  },
  {
    "name": "Age's",

```

```

    "type": "TextBox",
    "required": false,
    "validate": false
  }
]
},
{
  "id": 4107,
  "duration": 30,
  "name": "Wrapper Test",
  "instructions": "",
  "createdAt": "Mon, 30 Apr 2012 12:59:05 GMT",
  "maxMarks": 0,
  "markingScheme": "FIXED",
  "sections": [
    {
      "name": "Section #1",
      "instructions": "",
      "duration": 30,
      "isTimed": false,
      "skills": []
    }
  ],
  "registrationFields": ": [
  {
    "name": "Email Address",
    "type": "TextBox",
    "required": true,
    "validate": false
  },
  {
    "name": "First Name",
    "type": "TextBox",
    "required": true,
    "validate": false
  },
  {
    "name": "Gender",
    "type": "SelectBox",
    "required": false,
    "validate": false,

```

	<pre>"values":["Male","Female"]   } ] } .... ... ... ] }</pre>
	<p><b>If the the request is invalid, the response will be:</b></p> <pre>{ "status": "error",   "error": { "code": Error-Code ,              "message": Error-Message }}</pre> <p><a href="#">For the mapping of common error-codes and messages, see "Error Handling".</a></p>

### 4.3 Get details of a particular Assessment

Request URL	http://api.mettl.com/v1/ <b>assessments</b> /{assessment-id}																							
Request Method	GET																							
Arguments	<table border="1"> <thead> <tr> <th>Name</th> <th>Mandatory</th> <th>Default</th> <th>Allowed Values</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ts</td> <td>Yes</td> <td>-</td> <td>current time-stamp</td> <td>For details on the format of the timestamp refer to "<a href="#">Security and Authentication</a>"</td> </tr> <tr> <td>ak</td> <td>Yes</td> <td>-</td> <td>Client's API key</td> <td>Unique API Key is assigned to the client on registering for using Mettl APIs</td> </tr> <tr> <td>asgn</td> <td>Yes</td> <td>-</td> <td>Generated request signature</td> <td>For details on "Signature Generation" refer to "<a href="#">Security and Authentication</a>"</td> </tr> </tbody> </table> <p><b>Example:</b>            API Request: http://api.mettl.com/v1/assessments/4107?ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xx}</p> <p>Output: Summary of the Assessment with Id 4107 is returned.</p>				Name	Mandatory	Default	Allowed Values	Description	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to " <a href="#">Security and Authentication</a> "	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to " <a href="#">Security and Authentication</a> "
Name	Mandatory	Default	Allowed Values	Description																				
ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to " <a href="#">Security and Authentication</a> "																				
ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs																				
asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to " <a href="#">Security and Authentication</a> "																				
Response	JSON containing summary of test																							
	<pre>{ "status": "SUCCESS",   "assessment": {     "id": 4107,     "duration": 50,     "testsTaken": 0,     "name": "Aptitude Test",     "instructions": "",     "allowCopyPaste": false,     "exitRedirectionURL": null,     "showReportToCandidateOnExit": false,     "onScreenCalculator": false,     "createdAt": "Thu, 14 Jun 2012 12:43:56 GMT",     "maxMarks": 125.0,     "markingScheme": "FIXED",     "sections": [</pre>																							

```

{
  "name": "Section #1",
  "instructions": "",
  "duration": 0,
  "isTimed": false,
  "skills": [
    {
      "name": "Quantitative Aptitude",
      "level": "EASY",
      "questionCount": 10,
      "source": "Mettl",
      "questionType": "MCQ",
      "duration": 15,
      "correctGrade": 1.0,
      "incorrectGrade": -0.0
    }
  ]
},
"registrationFields": [
  {
    "name": "Email Address",
    "type": "TextBox",
    "required": true,
    "validate": false,
    "values": []
  },
  {
    "name": "First Name",
    "type": "TextBox",
    "required": true,
    "validate": false
  },
  {
    "name": "Gender",
    "type": "SelectBox",
    "required": false,
    "validate": false,
    "values": ["Male", "Female"]
  }
]
}

```

**If the request is invalid, the response will be:**  
The following are the error codes specific to this API Request:

Error-Code	Error-Message
E001	Invalid Assessment Id
E007	Assessment Id deleted

[For the mapping of common error-codes and messages, see "Error Handling".](#)

## 4.4 Get all schedule details for an Assessment

Request URL	http://api.mettl.com/v1/assessments/{assessment-id}/schedules																								
Method	GET																								
Arguments	<table border="1"> <thead> <tr> <th>Name</th> <th>Mandatory</th> <th>Default</th> <th>Allowed Values</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ts</td> <td>Yes</td> <td>-</td> <td>current time-stamp</td> <td>For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a></td> </tr> <tr> <td>ak</td> <td>Yes</td> <td>-</td> <td>Client's API key</td> <td>Unique API Key is assigned to the client on registering for using Mettl APIs</td> </tr> <tr> <td>asgn</td> <td>Yes</td> <td>-</td> <td>Generated request signature</td> <td>For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a></td> </tr> </tbody> </table> <p><b>Example:</b>  API Request: http://api.mettl.com/v1/assessments/4501/schedules?ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xx}</p> <p><b>Optional:</b> Filters to obtain schedules of a specific type.  <pre>"filter":{   "imageProctoring"      :true,   "isCandidateAuthProctored":true,   "webProctoring"       :{     "enabled"            : true,     "count"              : 4,     "showRemainingCounts": true   },   "type"                 : "OpenForAll",   "scheduleType"        : "AlwaysOn" }</pre> Output: Details of all schedules of the Assessment with Id 4501 are returned.</p>					Name	Mandatory	Default	Allowed Values	Description	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>
Name	Mandatory	Default	Allowed Values	Description																					
ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>																					
ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs																					
asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>																					
Response	JSON containing details of all schedules for an assessment																								
	<pre>{   "status": "SUCCESS",   "schedules": [     {</pre>																								

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```

    "id": 8065,
    "name": "Schedule 1",
    "accessKey": "gibfedb98d",
    "accessUrl": "http://tests.mettl.com/take-test/6cWHi1Y6vguUZHdJQhvorg==",
    "status": "ACTIVE",
    "createdAt": "Thu, 14 Jun 2012 12:44:29 GMT",
    "imageProctoring": false,
    "isCandidateAuthProctored": false,
    "webProctoring": {
      "enabled": false,
      "count": 0,
      "showRemainingCounts": true
    },
    "scheduleType": "OpenForAll",
    "scheduleWindow": {
      "fixedAccessOption": null,
      "startsOnDate": null,
      "endsOnDate": null,
      "startsOnTime": null,
      "endsOnTime": null,
      "timeZone": null
    },
    "access": {
      "type": "ByInvitation",
      "candidates": [
        {
          "name": "saarthak",
          "email": "saarthakvats@gmail.com"
        }
      ]
    },
    "ipAccessRestriction": {
      "enabled": false
    },
    "allowCopyPaste": true,
    "exitRedirectionUrl": null
  }
  ...
  ...
  ...
  ]
}

```

## 4.5 Get all schedules in an Account

Request URL	http://api.mettl.com/v1/schedules																																											
Method	GET																																											
Arguments	<table border="1"> <thead> <tr> <th>Name</th> <th>Mandatory</th> <th>Default</th> <th>Allowed Values</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>limit</td> <td>No</td> <td>20</td> <td>Integers [0 to 100]</td> <td>Number of schedules to fetch</td> </tr> <tr> <td>offset</td> <td>No</td> <td>0</td> <td>Integers (max # of schedules)</td> <td>Return # of schedules starting from offset number</td> </tr> <tr> <td>sort</td> <td>No</td> <td>createdAt</td> <td>createdAt, testTaken, name</td> <td>Sorting scheme chosen while returning assessments</td> </tr> <tr> <td>sort_order</td> <td>No</td> <td>desc</td> <td>asc, desc</td> <td>Ascending or Descending order of sorting</td> </tr> <tr> <td>ts</td> <td>Yes</td> <td>-</td> <td>current time-stamp</td> <td>For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a></td> </tr> <tr> <td>ak</td> <td>Yes</td> <td>-</td> <td>Client's API key</td> <td>Unique API Key is assigned to the client on registering for using Mettl APIs</td> </tr> <tr> <td>asgn</td> <td>Yes</td> <td>-</td> <td>Generated request signature</td> <td>For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a></td> </tr> </tbody> </table> <p><b>Example:</b>  API Request: http://api.mettl.com/v1/schedules?limit=5&amp;ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xx}</p> <p><b>Optional:</b> Filters to obtain schedules of a specific type.</p> <pre> "filter":{   "imageProctoring"      :true,   "isCandidateAuthProctored":true,   "webProctoring"       :{     "enabled"            : true,     "count"              : 4,     "showRemainingCounts": true   },   "type"                 : "OpenForAll",   "scheduleType"        : "AlwaysOn" } </pre> <p>Output: Details of all schedules are returned.</p>				Name	Mandatory	Default	Allowed Values	Description	limit	No	20	Integers [0 to 100]	Number of schedules to fetch	offset	No	0	Integers (max # of schedules)	Return # of schedules starting from offset number	sort	No	createdAt	createdAt, testTaken, name	Sorting scheme chosen while returning assessments	sort_order	No	desc	asc, desc	Ascending or Descending order of sorting	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>
Name	Mandatory	Default	Allowed Values	Description																																								
limit	No	20	Integers [0 to 100]	Number of schedules to fetch																																								
offset	No	0	Integers (max # of schedules)	Return # of schedules starting from offset number																																								
sort	No	createdAt	createdAt, testTaken, name	Sorting scheme chosen while returning assessments																																								
sort_order	No	desc	asc, desc	Ascending or Descending order of sorting																																								
ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>																																								
ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs																																								
asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>																																								

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Response	JSON containing details of all schedules in your account
	<pre> {   "status": "SUCCESS",   "schedules": [     {       "id": 2654,       "name": "Schedule 1",       "accessKey": "oe4461cb6",       "accessUri": null,       "status": "ACTIVE",       "createdAt": "Fri, 13 Jan 2012 09:02:10 GMT",       "imageProctoring": false,       "isCandidateAuthProctored": false       "webProctoring": {         "enabled": false,         "count": 0,         "showRemainingCounts": true       },       "scheduleType": "Fixed",       "scheduleWindow": {         "fixedAccessOption": "SlotWise",         "startsOnDate": "Thu, 27 Jun 2013",         "endsOnDate": "Sun, 30 Jun 2013",         "startsOnTime": "08:00:00",         "endsOnTime": "18:00:00",         "timeZone": "UTC+05:30"       },       "access": {         "type": "OpenForAll",         "candidates": [           {             "name": "coldplayjj",             "email": "coldplayjj@idl.test"           },           {             "name": "saarthak",             "email": "saarthak@induslynk.com"           }         ]       }     }   ],   "ipAccessRestriction": { </pre>

```

    "enabled": false
  },
  "allowCopyPaste": true,
  "exitRedirectionUrl": null,
  "assessmentDetails": {
    "id": 0,
    "duration": 60,
    "name": "Aditi ASP.NET 4-6 years",
    "instructions": "1. The total test duration is 60 minutes.\n2. The test consists of 3 sections namely ASP.NET Aptitude, Aptitude & Coding skills.\n3. The sections are not timed individually.\n4. The sections may be attempted in any order.\n5. There is no negative marking.\n6. Evaluation for the coding section will be done based on the solution and not the syntax.\n\nAll the best !",
    "createdAt": "Wed, 11 Jan 2012 13:28:02 GMT",
    "maxMarks": 0,
    "markingScheme": null,
    "sections": null,
    "registrationFields": null
  }
},
{
  "id": 7701,
  "name": null,
  "accessKey": "iA2E5F435",
  "accessUrl": null,
  "status": "ACTIVE",
  "createdAt": "Wed, 02 May 2012 18:36:44 GMT",
  "imageProctoring": false,
  "webProctoring": {
    "enabled": false,
    "count": 5,
    "showRemainingCounts": true
  },
  "scheduleType": "Fixed",
  "scheduleWindow": {
    "fixedAccessOption": "ExactTime",
    "startsOnDate": "Thu, 27 Jun 2013",
    "endsOnDate": "Sun, 30 Jun 2013",
    "startsOnTime": "08:00:00",
    "endsOnTime": "18:00:00",
    "timeZone": "UTC+05:30"
  },
  "access": {
    "type": "ByInvitation",

```

	<pre>     "candidates": [       {         "name": "MATHUR MATHUR",         "email": "mathur@educomponline.com"       }     ]   },   "ipAccessRestriction": {     "enabled": false   },   "allowCopyPaste": true,   "exitRedirectionUrl": null,   "assessmentDetails": {     "id": 0,     "duration": 30,     "name": "maths 9",     "instructions": "&lt;strong&gt;Instruction:&lt;/strong&gt;&lt;br/&gt;&lt;ol style='padding:5px 10px;margin-left:30px;'&gt;&lt;li&gt;The test consists of 15 questions.&lt;/li&gt;&lt;li&gt;The test comprises of 4 knowledge level, 8 comprehension level, and 3 application level questions.&lt;/li&gt;&lt;li&gt;All the knowledge based questions will carry 1 mark. The comprehension based questions will carry 3 marks and the application based questions will carry 4 marks. &lt;/li&gt;&lt;li&gt;Total Marks: 40&lt;/li&gt;&lt;li&gt;Time Allotted: 30 minutes&lt;/li&gt;&lt;/ol&gt;",     "createdAt": "Wed, 02 May 2012 18:34:58 GMT",     "maxMarks": 0,     "markingScheme": null,     "sections": null,     "registrationFields": null   } } </pre>
	<p><b>If the request is invalid, the response will be:</b></p> <pre> { "status": "error",   "error": { "code": Error-Code ,             "message": Error-Message }} </pre> <p><a href="#">For the mapping of common error-codes and messages, see "Error Handling".</a></p>

## 4.6 Get details of a particular schedule in an account

Request URL	http://api.mettl.com/v1/schedules/{access-key}																								
Request Method	GET																								
Arguments	<table border="1"> <thead> <tr> <th>Name</th> <th>Mandatory</th> <th>Default</th> <th>Allowed Values</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ts</td> <td>Yes</td> <td>-</td> <td>current time-stamp</td> <td>For details on the format of the timestamp refer to "<a href="#">Security and Authentication</a>"</td> </tr> <tr> <td>ak</td> <td>Yes</td> <td>-</td> <td>Client's API key</td> <td>Unique API Key is assigned to the client on registering for using Mettl APIs</td> </tr> <tr> <td>asgn</td> <td>Yes</td> <td>-</td> <td>Generated request signature</td> <td>For details on "Signature Generation" refer to "<a href="#">Security and Authentication</a>"</td> </tr> </tbody> </table> <p><b>Example:</b>            API Request: http://api.mettl.com/v1/schedules/oAp70cc64d8?ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xx}</p> <p>Output:            Details of the schedule with access-key op687f93ce are returned.</p>					Name	Mandatory	Default	Allowed Values	Description	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to " <a href="#">Security and Authentication</a> "	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to " <a href="#">Security and Authentication</a> "
Name	Mandatory	Default	Allowed Values	Description																					
ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to " <a href="#">Security and Authentication</a> "																					
ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs																					
asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to " <a href="#">Security and Authentication</a> "																					
Response	JSON containing details of a particular schedule																								
	<pre>{   "status": "SUCCESS",   "schedule": {     "id": 7537,     "name": "Schedule 1",     "accessKey": "oAp70cc64d8",     "accessUrl": null,     "status": "ACTIVE",     "createdAt": "Tue, 24 Apr 2012 04:08:12 GMT",     "imageProctoring": true,     "webProctoring": {       "enabled": true,       "count": 4,       "showRemainingCounts": true     }   } },</pre>																								

```

"scheduleType": "Fixed",
"scheduleWindow": {
  "fixedAccessOption": "ExactTime",
  "startsOnDate": "Thu, 27 Jun 2013",
  "endsOnDate": "Sun, 30 Jun 2013",
  "startsOnTime": "08:00:00",
  "endsOnTime": "18:00:00",
  "timeZone": "UTC+05:30"
},
"access": {
  "type": "OpenForAll",
  "candidates": [
    {
      "name": "saarthak",
      "email": "saarthak@induslynk.com"
    }
  ]
},
"ipAccessRestriction": {
  "enabled": false
},
"allowCopyPaste": true,
"exitRedirectionUrl": null,
"assessmentDetails": {
  "id": 0,
  "duration": 3,
  "name": "3 min java 2-4 dev",
  "instructions": "",
  "createdAt": "Tue, 24 Apr 2012 04:08:01 GMT",
  "maxMarks": 0,
  "markingScheme": null,
  "sections": null,
  "registrationFields": null
}
}
}

```

If the request is invalid, the response will be:

```
{ "status": "error", "error": { "code": Error-Code, "message": Error-Message } }
```

The following are the error codes specific to this API :

Error-Code	Error-Message
E002	Invalid Access Key
E008	Schedule deleted

[For the mapping of common error-codes and messages, see "Error Handling".](#)



## 4.7 Edit Assessment settings for a particular Assessment

Use this API to edit assessment settings for a particular assessment.

Request URL	http://api.mettl.com/v1/assessments/{assessment-id}/settings/edit				
Request Method	POST				
Arguments	<b>Name</b>	<b>Mandatory</b>	<b>Default</b>	<b>Allowed Values</b>	<b>Description</b>
	as	Yes	-	JSON formatted String as specified below	Assessment setting of the assessment which needs to be edited
	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>
	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs
	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>
	<p><b>Example:</b>  API Request: http://api.mettl.com/v1/assessments/4501/settings/edit  Post Parameters:  as={see-sample-below}&amp;ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx}</p> <pre>as = { "assessmentId" : {assessment-id} ,       "allowCopyPaste" : false ,       "exitRedirectionURL" : true ,        "instructions" : HTML tags allowed ,       "onScreenCalculator" : true ,       "showReportToCandidate" : true     } ,</pre> <p>Output: Details of the assessment with settings</p>				
Response	JSON containing details of a particular schedule				
	<pre>{   "status": "SUCCESS",   "assessment": { &lt;&lt;&lt; As described in section 4.2 &gt;&gt;&gt;} }</pre>				

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If the request is invalid, the response will be:  
{ "status": "error", "error": { "code": Error-Code, "message": Error-Message } }  
The following are the error codes specific to this API :

Error-Code	Error-Message
E001	Invalid Assessment Id
E007	Assessment Id deleted
E022	Invalid Assessment settings parameters

[For the mapping of common error-codes and messages, see "Error Handling".](#)

## 5 Create/Edit Schedule

### 5.1 Create Schedule for a particular Assessment

Use this API to create a schedule for a specific assessment. You can also get **notifications** using the 3 **callback URLs** on the following events –

1. When a candidate’s test starts (testStartNotificationUrl)
2. When a candidate’s test ends (testFinishNotificationUrl)
3. When a candidate’s test result gets generated (testGradedNotificationUrl)
4. When an expired candidate is allowed to resume (testResumeEnabledForExpiredTestURL)

We are expecting all callback URLs to have

Request Method	POST				
Request Header	content-type : application/json				
Request URL	http://api.mettl.com/v1/assessments/{assessment-id}/schedules				
Request Method	POST				
Arguments	<b>Name</b>	<b>Mandatory</b>	<b>Default</b>	<b>Allowed Values</b>	<b>Description</b>
	sc	Yes	-	JSON formatted String as specified below	Schedule Details of a single Schedule that needs to be created for the corresponding Assessment
	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">“Security and Authentication”</a>
	ak	Yes	-	Client’s API key	Unique API Key is assigned to the client on registering for using Mettl APIs
	asgn	Yes	-	Generated request signature	For details on “Signature Generation” refer to <a href="#">“Security and Authentication”</a>
	<p><b>Example:</b>            API Request: http://api.mettl.com/v1/assessments/4501/schedules            Post Parameters:            sc={see-sample-below}&amp;ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx}</p>				

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```

sc =
{
  "assessmentId": 4056,
  "name": "Schedule via API",
  "imageProctoring": false,
  "isCandidateAuthProctored" : false,
  "webProctoring": {
    "enabled": false
  },
  "scheduleType": "AlwaysOn",          //"AlwaysOn"/"Fixed"
  "scheduleWindow": null,
  "access": {
    "type": "OpenForAll",
    "candidates": null,
    "sendEmail": false
  },
  "ipAccessRestriction": {
    "enabled": false
  },
  "testGradeNotification": {
    "enabled": true,
    "recipients": ["abc@email.com", "bcdcd@email.com"]          //Should be valid email ID
  },
  "allowCopyPaste": true,
  "exitRedirectionUrl": "http://exit/redirection/url/here",
  "sourceApp": "Name Of Application Hitting the API",          //Brief Description of Schedule - Mandatory
  "testStartNotificationUrl": "http://application/path/listening/to/the/start/request",
  "testFinishNotificationUrl": "http://application/path/listening/to/the/finish/request",
  "testGradedNotificationUrl": "http://application/path/listening/to/the/grade/response/request",
  "testResumeEnabledForExpiredTestURL": "http://application/path/listening/to/the/resumedenabled/request"
}

```

**More options for webProctoring:**

```

"webProctoring": {
  "enabled": false
}
"webProctoring": {
  "enabled": true,
  "count": 4,
  "showRemainingCounts": true
},

```

more options for scheduleWindow:

	<pre> "scheduleWindow": {   "fixedAccessOption": "ExactTime",           //"ExactTime"/"SlotWise"   "startsOnDate": "Thu, 27 Jun 2013",   "endsOnDate": "Sun, 30 Jun 2013",   "startsOnTime": "08:00:00",   "endsOnTime": "18:00:00",   "timeZone": "UTC+05:30" },  <b>More options for access:</b> "access": {   "type": "ByInvitation",   "candidates": [     {       "name": "saarthak",       "email": "saarthak@induslynk.com"     },     { ... }   ]   "sendEmail": true },  more options about ipAccessRestrictions: "ipAccessRestriction": {   "enabled": true,   "type": "SINGLE",   "ip": "125.63.71.142" }, "ipAccessRestriction": {   "enabled": true,   "type": "RANGE",   "ranges": null }, </pre> <p>Output: Details of the schedule created are returned.</p>
Response	JSON containing details of a particular schedule
	<pre> {   "status": "SUCCESS",   "createdSchedule": {     "assessmentId": 4056, </pre>

	<pre>"id": 13919, "name": "Schedule via API", "accessKey": "o302520aa", "accessUrl": "http://tests.mettl.com/authenticateKey/o302520aa", "status": "ACTIVE" } }</pre> <p>API consumers will receive data about Test start, Test completion, Grading completion as mentioned in following sections -</p> <ol style="list-style-type: none"> <li>1. <a href="#">Response on Test Start</a></li> <li>2. <a href="#">Response on Test Completion</a></li> <li>3. <a href="#">Response on Test Grading completion</a></li> <li>4. <a href="#">Response on Enabling an Expired Candidate to Resume the Test</a></li> </ol>								
	<p><b>If the request is invalid, the response will be:</b>          { "status": "error", "error": { "code": Error-Code , "message": Error-Message } }</p> <p>The following are the error codes specific to this API :</p> <table border="1" data-bbox="693 682 1638 925"> <thead> <tr> <th>Error-Code</th> <th>Error-Message</th> </tr> </thead> <tbody> <tr> <td>E001</td> <td>Invalid Assessment Id</td> </tr> <tr> <td>E007</td> <td>Assessment Id deleted</td> </tr> <tr> <td>E034</td> <td>Invalid EmailId {email} supplied in recipients of testGradeNotification</td> </tr> </tbody> </table> <p><a href="#">For the mapping of common error-codes and messages, see "Error Handling".</a></p>	Error-Code	Error-Message	E001	Invalid Assessment Id	E007	Assessment Id deleted	E034	Invalid EmailId {email} supplied in recipients of testGradeNotification
Error-Code	Error-Message								
E001	Invalid Assessment Id								
E007	Assessment Id deleted								
E034	Invalid EmailId {email} supplied in recipients of testGradeNotification								

## 5.2 Edit Schedule for a particular Assessment

Request URL	http://api.mettl.com/v1/schedules/{access-key}/edit				
Request Method	POST				
Arguments	<b>Name</b>	<b>Mandatory</b>	<b>Default</b>	<b>Allowed Values</b>	<b>Description</b>
	sc	Yes	-	JSON formatted String as specified below	Schedule Details of the Schedule that needs to be edited
	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to " <a href="#">Security and Authentication</a> "
	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs
	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to " <a href="#">Security and Authentication</a> "
<p><b>Example:</b>  API Request: http://api.mettl.com/v1/schedules/oAp70cc64d8/edit  Post Parameters:  sc={see-sample-below}&amp;ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xx}</p> <p>sc= &lt;&lt; Same as 5.1 &gt;&gt;</p> <p>Access options have changed from 5.1 , please find below the new JSON</p> <pre>"access": {   "type": "ByInvitation",   "candidates": {     "add": [       {         "name": "saarthak",         "email": "saarthak@induslynk.com"       },       { ...     ]   },   "remove": ["name@domain.com", "name2@domain.com"] }</pre> <p>"sendEmail": true</p>					

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	<p>} Any new candidate which are needed to be invited have to be in the "add" list and any candidates whose invites needs to be revoked have to be added in "remove" list.</p> <p>Output: Details of the schedule edited are returned.</p>
Response	JSON containing details of a particular schedule
	<pre>{   "status": "SUCCESS",   "schedule": {     "id": 7537,     "name": "Schedule 1",     "accessKey": "oAp70cc64d8",     "accessUrl": null,     "status": "ACTIVE",     "createdAt": "Tue, 24 Apr 2014 04:08:12 GMT",     "imageProctoring": false,     "webProctoring": {       "enabled": false     },     "scheduleType": "Fixed",     "scheduleWindow": {       "fixedAccessOption": "ExactTime",       "startsOnDate": "Thu, 27 Jun 2014",       "endsOnDate": "Sun, 30 Jun 2014",       "startsOnTime": "08:00:00",       "endsOnTime": "18:00:00",       "timeZone": "UTC+05:30"     },     "access": {       "type": "OpenForAll"     },     "ipAccessRestriction": {       "enabled": false     },     "testGradeNotification": {       "enabled": true,       "recipients": ["abc@email.com", "bcdcd@email.com"] //Should be valid email ID     },     "allowCopyPaste": true,   } }</pre>



	<pre> "exitRedirectionUrl": null, "assessmentDetails": {   "id": 0,   "duration": 3,   "name": "3 min java 2-4 dev",   "instructions": "",   "createdAt": "Tue, 24 Apr 2014 04:08:01 GMT",   "maxMarks": 0,   "markingScheme": null,   "sections": null,   "registrationFields": null } } } </pre>															
	<p><b>If the request is invalid, the response will be:</b>  <code>{ "status": "error", "error": { "code": Error-Code , "message": Error-Message } }</code></p> <p>The following are the error codes specific to this API :</p> <table border="1" data-bbox="472 743 1864 1079"> <thead> <tr> <th>Error-Code</th> <th>Error-Message</th> <th>Reason</th> </tr> </thead> <tbody> <tr> <td>E002</td> <td>Invalid access key</td> <td></td> </tr> <tr> <td>E019</td> <td>Schedule name already exists</td> <td></td> </tr> <tr> <td>E020</td> <td>Invalid schedule type/Schedule window</td> <td>Schedule type is fixed and no window provided or Schedule type is always on and windows are provided.</td> </tr> <tr> <td>E034</td> <td>Invalid EmailId {email} supplied in recipients of testGradeNotification</td> <td></td> </tr> </tbody> </table> <p><a href="#">For the mapping of common error-codes and messages, see "Error Handling".</a></p>	Error-Code	Error-Message	Reason	E002	Invalid access key		E019	Schedule name already exists		E020	Invalid schedule type/Schedule window	Schedule type is fixed and no window provided or Schedule type is always on and windows are provided.	E034	Invalid EmailId {email} supplied in recipients of testGradeNotification	
Error-Code	Error-Message	Reason														
E002	Invalid access key															
E019	Schedule name already exists															
E020	Invalid schedule type/Schedule window	Schedule type is fixed and no window provided or Schedule type is always on and windows are provided.														
E034	Invalid EmailId {email} supplied in recipients of testGradeNotification															

## 6 Test taking process

### 6.1 Start/Register Candidate's Test

#### 6.1.1 Option 1 – Use Test Link to Register Candidate

Use the test invitation link directly in application. This will take the candidate to registration page. For example:

```
<html>
  <head> ... </head>
  <body>
    ...
    <a href="http://tests.mettl.com/authenticateKey/op687f93ce">
      Click here to start your Java Test
    </a>
    ...
  </body>
</html>
```

#### 6.1.2 Option 2 – Register candidate(s) for a test & receive notifications on Test start, completion, grading

Request URL	http://api.mettl.com/v1/ <b>schedules</b> / <b>{access-key}</b> / <b>candidates</b>																												
Request Method	POST																												
Arguments	<p><b>NOTE: A maximum of 20 candidates can be registered using a single API Request of this type.</b></p> <table border="1"> <thead> <tr> <th>Name</th> <th>Mandatory</th> <th>Default</th> <th>Allowed Values</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>rd</td> <td>Yes</td> <td>-</td> <td>JSON formatted array of registration details</td> <td>Registration details of multiple candidates (max. 20 candidates) combined in JSON format</td> </tr> <tr> <td>ts</td> <td>Yes</td> <td>-</td> <td>current time-stamp</td> <td>For details on the format of the timestamp refer to "<a href="#">Security and Authentication</a>"</td> </tr> <tr> <td>ak</td> <td>Yes</td> <td>-</td> <td>Client's API key</td> <td>Unique API Key is assigned to the client on registering for using Mettl APIs</td> </tr> <tr> <td>asgn</td> <td>Yes</td> <td>-</td> <td>Generated request signature</td> <td>For details on "Signature Generation" refer to "<a href="#">Security and Authentication</a>"</td> </tr> </tbody> </table>				Name	Mandatory	Default	Allowed Values	Description	rd	Yes	-	JSON formatted array of registration details	Registration details of multiple candidates (max. 20 candidates) combined in JSON format	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to " <a href="#">Security and Authentication</a> "	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to " <a href="#">Security and Authentication</a> "
Name	Mandatory	Default	Allowed Values	Description																									
rd	Yes	-	JSON formatted array of registration details	Registration details of multiple candidates (max. 20 candidates) combined in JSON format																									
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asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to " <a href="#">Security and Authentication</a> "																									

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	<p><b>Note:</b> The fields to be supplied for registration (<i>name, gender etc.</i>) are as per the configuration made in the METTL Account of the client. Email is a mandatory registration field in all cases; other fields can be configured as per requirement.</p> <p><b>Example:</b> The “rd” will be one of the parameters to be sent using <b>HTTP POST method as JSON data</b>. The name of the parameter will be ‘rd’</p> <p>The fields to be sent with the API call are as per the selection made when creating an assessment using your account on mettl.com.</p> <p>See example given below for JSON data for registration-details for 3 candidates (where <i>Email-id, First Name, Last Name, Date of birth, Country</i> were chosen as mandatory registration fields).</p> <pre>rd = {   "registrationDetails": [     {"Email Address": "albert@g.com", "First Name": "Albert", "Last Name": "Smith", "Date of birth": "Jan 29 1981", "Country": "United States"},     {"Email Address": "christian@g.com", "First Name": "Christian", "Last Name": "Smith", "Date of birth": "Jan 27 1982", "Country": "United States"},     {"Email Address": "shailesh@g.com", "First Name": "Shailesh", "Last Name": "Gupta", "Date of birth": "Jan 26 1981", "Country": "India"}],   "optionalParams": [     {"email": "albert@g.com", "context_data": "sales profile candidate"},     {"email": "shailesh@g.com", "context_data": "technical profile candidate"}] }</pre> <p>You can send details of maximum <b>20 candidates</b> at once for registration</p> <p>Note on Optional parameter: <b>context_data</b> can be used by API users to pass metadata of candidates who are being registered. This metadata would then be passed back to API consumer in TestStart, TestFinish and TestGrade notifications as mentioned in the response table of this API. This would be useful for the API users to derive details of the candidates from the notifications based on the metadata.</p>
Response	<p><b>JSON Output:</b> Registration status corresponding to each distinct user (whose credentials were supplied) is returned.</p> <pre>{ "registrationStatus": [</pre> <p><b>CASE 1:</b> The test is yet to be taken by the candidate. In this case the candidate is registered with Mettl and a <b>url</b> is returned which can be used to direct the candidate to the test window (hosted by mettl.com). This URL will be active throughout the duration of the schedule.</p> <pre>{ "email": "albert@g.com", "status": "ToBeTaken", "message": "Candidate successfully registered for the test", "url": "<a href="http://tests.mettl.com/take-test?ec=ttur990dqvz">http://tests.mettl.com/take-test?ec=ttur990dqvz</a>",</pre>

**CASE 2:** The test has already been taken by the candidate (**status:** *completed*). In this case, a status mentioning the same is returned for the candidate for this test.

```
{ "email": "shailesh@g.com", "status": "Completed", "message": "Email ID has already taken this test", "url": null },
```

**CASE 3:** The test is *in-progress* (or has been interrupted eg: by a power failure). In this case, a status mentioning the same is returned along with a **url** to resume the test in its present state.

```
{ "email": "shailesh@g.com", "status": "InProgress", "message": "The test is in progress", "url": "http://tests.mettl.com/take-test?ec=ttur990dgyx"},
```

When a registered candidate starts or finishes a test or when Mettl completes grading of a particular candidate, API consumer will receive notifications as mentioned below. Please note API consumer needs to set notification/callback URLs while creating a schedule (as mentioned in [Create Schedule API](#))

#### Response on Start of Assessment at testStartNotificationUrl

```
{
  "EVENT_TYPE": "startAssessment",
  "invitation_key": "2441e1b",
  "assessment_id": 36792,
  "candidate_instance_id": 1452533,
  "context_data": "{\"applicant_id\":874}",
  "timestamp_GMT": "Fri, 29 Aug 2014 08:55:26 GMT",
  "source_app": "certification-app",
  "notification_url": "http://application/path/listening/to/the/start/request",
  "name": "Amit",
  "email": "amit.lamba@mettl.com"
}
```

#### Response on Completion of Assessment at testFinishNotificationUrl

```
{
  "EVENT_TYPE": "finishTest",
  "invitation_key": "2441e1b",
  "assessment_id": 36792,
  "candidate_instance_id": 1452533,
  "context_data": "{\"applicant_id\":874}",
  "timestamp_GMT": "Fri, 29 Aug 2014 09:48:53 GMT",
  "source_app": "certification-app",
  "notification_url": "http://application/path/listening/to/the/finish/request",
  "name": "Amit",
  "email": "amit.lamba@mettl.com",
  "finish_mode": "NormalSubmission"
}
```

#### Response on Grading Completion of Assessment at testGradedNotificationUrl

```
{
  "assessmentId": 36792,
  "percentile": 39.05,
  "EVENT_TYPE": "gradedAssessment",
  "invitation_key": "1c2a875a",
  "candidate_instance_id": 1452113,
  "context_data": "",
  "timestamp_GMT": "Fri, 29 Aug 2014 07:52:39 GMT",
  "source_app": "Mettl",
  "notification_url": " http://application/path/listening/to/the/grade/response/request ",
  "name": "Amit",
  "email": "amit.lamba@gmail.com",
  "finish_mode": "NormalSubmission",
  "start_time_GMT": "29-Aug-14 6:16:17 AM",
  "end_time_GMT": "29-Aug-14 7:52:39 AM",
  "marks_scored": 29,
  "max_marks": 60,
  "attempt_time": 0,
  "assessment_name": "Engineering Campus Test(Aptitude)",
  "client_id": 4033,
  "schedule_title": "NIT Patna",
  "start_time": "29-Aug-14 11:46:17 AM",
  "end_time": "29-Aug-14 1:22:39 PM"
}
```

#### Response on Enabling an Expired Candidate to Resume the Test at testResumeEnabledForExpiredTestURL

```
{
  "assessmentId": 36792,
  "candidate_instance_id": 1452113,
  "context_data": "",
  "source_app": "Mettl",
  "notification_url": "http://application/path/listening/to/the/resumedenabled/request",
}
```

Note: *context\_data* contains the value passed in optional parameter context\_data when registering a particular candidate.

The following are the error codes specific to this API Request:

Error-Code	Error-Message	Reason
E002	Invalid access-key	
E008	Schedule deleted	
E003	Mandatory parameter ( <i>parameter_name</i> ) for registration not supplied	
E004	Invalid format for parameter email id	
E010	Request data too big	If you try to register more than 20 candidates

[For the mapping of common error-codes and messages, see "Error Handling".](#)

## 6.2 Fetch status of test for all candidates in a schedule

Request URL	http://api.mettl.com/v1/schedules/{access-key}/candidates																																																	
Method	GET																																																	
Arguments	<table border="1"> <thead> <tr> <th>Name</th> <th>Mandatory</th> <th>Default</th> <th>Allowed Values</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>limit</td> <td>No</td> <td>20</td> <td>Integers [0 to 100]</td> <td>Number of candidates to fetch</td> </tr> <tr> <td>offset</td> <td>No</td> <td>0</td> <td>Integers (max # of candidates)</td> <td>Return # of candidates starting from offset number</td> </tr> <tr> <td>sort</td> <td>No</td> <td>testStartTime</td> <td>testStartTime, name</td> <td>Sorting scheme chosen while returning candidates</td> </tr> <tr> <td>sort_order</td> <td>No</td> <td>desc</td> <td>asc, desc</td> <td>Ascending or Descending order of sorting</td> </tr> <tr> <td>qr</td> <td>No</td> <td>false</td> <td>true, false</td> <td>Set true if you want to receive responses for essay questions, set for manual grading.</td> </tr> <tr> <td>ts</td> <td>Yes</td> <td>-</td> <td>current time-stamp</td> <td>For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a></td> </tr> <tr> <td>ak</td> <td>Yes</td> <td>-</td> <td>Client's API key</td> <td>Unique API Key is assigned to the client on registering for using Mettl APIs</td> </tr> <tr> <td>asgn</td> <td>Yes</td> <td>-</td> <td>Generated request signature</td> <td>For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a></td> </tr> </tbody> </table> <p><b>Example:</b>  API Request: http://api.mettl.com/v1/schedules/op687f93ce/candidates?qr=true&amp;ts=1365740665&amp;ak={xxxxxxxxxxxxx}&amp;asgn={xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx}</p> <p><b>Output:</b>  Status of the candidates registered for schedule with access-key op687f93ce are returned.</p>					Name	Mandatory	Default	Allowed Values	Description	limit	No	20	Integers [0 to 100]	Number of candidates to fetch	offset	No	0	Integers (max # of candidates)	Return # of candidates starting from offset number	sort	No	testStartTime	testStartTime, name	Sorting scheme chosen while returning candidates	sort_order	No	desc	asc, desc	Ascending or Descending order of sorting	qr	No	false	true, false	Set true if you want to receive responses for essay questions, set for manual grading.	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>
Name	Mandatory	Default	Allowed Values	Description																																														
limit	No	20	Integers [0 to 100]	Number of candidates to fetch																																														
offset	No	0	Integers (max # of candidates)	Return # of candidates starting from offset number																																														
sort	No	testStartTime	testStartTime, name	Sorting scheme chosen while returning candidates																																														
sort_order	No	desc	asc, desc	Ascending or Descending order of sorting																																														
qr	No	false	true, false	Set true if you want to receive responses for essay questions, set for manual grading.																																														
ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>																																														
ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs																																														
asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>																																														
Response	<pre>{   "status"      : "SUCCESS",   "candidates" : [     { "email" : "albert@g.com",       "registration" : { "Your Name" : "Albert Smith", "DOB" : "Jan 29 1981", "Country" : "United States" }       "test-status" : { &lt;&lt;&lt;&lt; Detailed Test Statuses Below &gt;&gt;&gt;&gt; },       "email" : "christina@g.com", </pre>																																																	

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```

    "registration"      : {<<<< Detailed Registration fields Below >>>>}
    "test-status"      : {<<<< Detailed Test Statuses Below>>>>}}]
    {...}]
  "paging": {
    "previous": null,      // Null for previous/next if on first/last page
    "next": "http://http://api.mettl.com/v1/schedules/52267396/candidates?ak=73880f79-6ed9-454b-aa0e-57b5a35fd3bc&asgn=guBdlVxfUKS80kUuNH5Ko0xAPXc%3D&limit=3&offset=3&sort=testStartTime&sort_order=desc&ts=1449042926"
  }
}

```

**<<<<Possible Test Statuses>>>>**

```

{
  "email": "4@mettl.com",
  "registration": {},
  "testStatus": {
    "status": "ToBeTaken"
  }
}

```

---

```

{
  "email": "4@mettl.com",
  "registration": {},
  "testStatus": {
    "status": "InProgress",
    "startTime": "Tue, 24 Apr 2012 14:08:01 GMT"
  }
}

```

---

```

{
  "email": "4@mettl.com",
  "registration": {},
  "testStatus": {
    "status": "InProgress",
    "startTime": "Tue, 24 Apr 2012 14:08:01 GMT",
    "endTime": "Tue, 24 Apr 2012 15:28:34 GMT"
  }
}

```

---



```

{
  "email": "5@mettl.com",
  "registration": {
    "Email Address": "5@mettl.com",
    "First Name": "5",
    "Age's": "5"
  },
  "testStatus": {
    "status": "Completed",
    "startTime": "Tue, 24 Apr 2012 14:08:01 GMT",
    "endTime": "Tue, 24 Apr 2012 15:28:34 GMT",
    "completionMode": "Expired",
    "pdfReport": "http://mettl.com/apireport/getCandidateReport/pdrpt898409",
    "htmlReport": "http://mettl.com/corporate/analytics/share-report?key=5Nw9NfkDKEiQfU63QVUEEQ%3D%3D",
    "result": {
      "totalMarks": 0,
      "maxMarks": 3,
      "percentile": 100,
      "totalQuestions": 3,
      "totalCorrectAnswers": 0,
      "totalUnAnswered": 1,
      "attemptTime": 102,
      "sectionMarks": [
        {
          "sectionName": "Section #1",
          "totalMatks": 0,
          "maxMarks": 2,
          "timeTaken": 102,
          "totalQuestions": 2,
          "totalCorrectAnswers": 0,
          "totalUnAnswered": 1,
          "skillMarks": [
            {
              "skillName": "Skill #1",
              "totalMarks": 1,
              "totalCorrectAnswers": 0,
              "totalUnAnswered": 1,
              "timeTaken": 50
            },
            {
              "skillName": "Skill #2",
              "totalMarks": 1,

```

```

      "totalCorrectAnswers":0 ,
      "totalUnAnswered":1 ,
      "timeTaken": 50
    }
  ]
},
{
  "sectionName": "Section #2",
  "totalMarks": 0,
  "maxMarks": 1,
  "timeTaken": 0,
  "totalQuestions":1,
  "totalCorrectAnswers":0,
  "totalUnAnswered":0,
  "skillMarks":[
    {
      "skillName":"Skill #3",
      "totalMarks":1,
      "totalCorrectAnswers":0 ,
      "totalUnAnswered":0 ,
      "timeTaken": 2,
      "questions":[{
        "questionType": "LongAnswer"
        "questionText": "<div>Write an essay on inflation</div>"
        "hasWordLimit" : false
        "wordLimit": -1
        "wordCount": 100
        "candidateResponse": " <div><span style=\"color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 12.8000001907349px;
line-height: normal;\>In economics, inflation is a sustained increase in the general price level of goods and services in an economy over a period of time.
<strong>When the price level rises, each unit of currency buys fewer goods and services</strong>. </span></div>\n\n<ul>\n\n<li><span style=\"color: rgb(34, 34, 34);
font-family: arial, sans-serif; font-size: 12.8000001907349px; line-height: normal;\>Consequently, inflation reflects a reduction in the purchasing power per unit of
mone a loss of real value in the medium of exchange and unit of account within the economy</span></li>\n</ul>\n"
        "marksScored": 0
        "maxMarks": 1
      }
    ]
  }
}
]
}
}
}
}

```

	<p><b>&lt;&lt;&lt;Possible Registration fields &gt;&gt;&gt;</b></p> <p>"registration" : {"Your Name" : "Albert Smith", "DOB" : "Jan 29 1981", "Country" : "United States"}</p> <p>In case the access-key is configured with "imageProctoring" : true</p> <p>"registration" : {"Your Name" : "Albert Smith", "DOB" : "Jan 29 1981", "Country" : "United States", "referenceImageUrl" : "<a href="http://image-path-url-public-url">http://image-path-url-public-url</a>"}</p> <p>In case the access-key is configured with "imageProctoring" : true and "isCandidateAuthProctored" : true</p> <p>"registration" : {"Your Name" : "Albert Smith", "DOB" : "Jan 29 1981", "Country" : "United States", "referenceImageUrl" : "<a href="http://image-path-url-public-url">http://image-path-url-public-url</a>", "identityProofImageUrl" : "<a href="http://image-path-url-public-url">http://image-path-url-public-url</a>" }</p>				
	<p><b>If the request is invalid, the response will be:</b></p> <pre>{ "status": "error",   "error": { "code": Error-Code ,             "message": Error-Message }}</pre> <p>The following are the error codes specific to this API Request:</p> <table border="1" data-bbox="768 867 1520 987"> <thead> <tr> <th>Error-Code</th> <th>Error-Message</th> </tr> </thead> <tbody> <tr> <td>E002</td> <td>Invalid access-key</td> </tr> </tbody> </table> <p><a href="#">For the mapping of common error-codes and messages, see "Error Handling".</a></p>	Error-Code	Error-Message	E002	Invalid access-key
Error-Code	Error-Message				
E002	Invalid access-key				

### 6.3 Fetch status of a test for a candidate

Request URL	http://api.mettl.com/v1/schedules/{access-key}/candidates/{candidate-email-id}																													
Method	GET																													
Arguments	<table border="1"> <thead> <tr> <th>Name</th> <th>Mandatory</th> <th>Default</th> <th>Allowed Values</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>qr</td> <td>No</td> <td>false</td> <td>true, false</td> <td>Set true if you want to receive responses for essay questions, set for manual grading.</td> </tr> <tr> <td>ts</td> <td>Yes</td> <td>-</td> <td>current time-stamp</td> <td>For details on the format of the timestamp refer to "<a href="#">Security and Authentication</a>"</td> </tr> <tr> <td>ak</td> <td>Yes</td> <td>-</td> <td>Client's API key</td> <td>Unique API Key is assigned to the client on registering for using Mettl APIs</td> </tr> <tr> <td>asgn</td> <td>Yes</td> <td>-</td> <td>Generated request signature</td> <td>For details on "Signature Generation" refer to "<a href="#">Security and Authentication</a>"</td> </tr> </tbody> </table> <p><b>Example:</b>            API Request: http://api.mettl.com/v1/schedules/op687f93ce/candidates/albert@g.com?ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xx}</p> <p>Output:            Details of the candidate with email-id <a href="#">albert@g.com</a> registered for schedule with access-key op687f93ce are returned.</p>					Name	Mandatory	Default	Allowed Values	Description	qr	No	false	true, false	Set true if you want to receive responses for essay questions, set for manual grading.	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to " <a href="#">Security and Authentication</a> "	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to " <a href="#">Security and Authentication</a> "
Name	Mandatory	Default	Allowed Values	Description																										
qr	No	false	true, false	Set true if you want to receive responses for essay questions, set for manual grading.																										
ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to " <a href="#">Security and Authentication</a> "																										
ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs																										
asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to " <a href="#">Security and Authentication</a> "																										
Response	<pre>{   "status" : "SUCCESS",   "candidate" : { &lt;&lt;&lt; As described in section 6.2 &gt;&gt;&gt;}, }</pre>																													

If the request is invalid, the response will be:

```
{
  "status": "error",
  "error": { "code": Error-Code ,
            "message": Error-Message
          }
}
```

The following are the error codes specific to this API Request:

Error-Code	Error-Message
E002	Invalid access-key
E004	Invalid format for <i>email id</i>
E009	Invalid Email

[For the mapping of common error-codes and messages, see "Error Handling".](#)

## 6.4 Delete Report

This API Request will permanently delete the result details/reports pertaining to the specified candidate for the specified schedule, if the test has been “Completed” or is “Expired”. The tests “in-progress” will remain unaffected.

Request URL	http://api.mettl.com/v1/ <b>schedules</b> / <b>{access-key}</b> / <b>candidates</b> / <b>{candidate-email-id}</b>																							
Method	DELETE																							
Arguments	<table border="1"> <thead> <tr> <th>Name</th> <th>Mandatory</th> <th>Default</th> <th>Allowed Values</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ts</td> <td>Yes</td> <td>-</td> <td>current time-stamp</td> <td>For details on the format of the timestamp refer to “<a href="#">Security and Authentication</a>”</td> </tr> <tr> <td>ak</td> <td>Yes</td> <td>-</td> <td>Client’s API key</td> <td>Unique API Key is assigned to the client on registering for using Mettl APIs</td> </tr> <tr> <td>asgn</td> <td>Yes</td> <td>-</td> <td>Generated request signature</td> <td>For details on “Signature Generation” refer to “<a href="#">Security and Authentication</a>”</td> </tr> </tbody> </table>				Name	Mandatory	Default	Allowed Values	Description	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to “ <a href="#">Security and Authentication</a> ”	ak	Yes	-	Client’s API key	Unique API Key is assigned to the client on registering for using Mettl APIs	asgn	Yes	-	Generated request signature	For details on “Signature Generation” refer to “ <a href="#">Security and Authentication</a> ”
Name	Mandatory	Default	Allowed Values	Description																				
ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to “ <a href="#">Security and Authentication</a> ”																				
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asgn	Yes	-	Generated request signature	For details on “Signature Generation” refer to “ <a href="#">Security and Authentication</a> ”																				
Response	<p>{ “status” : “SUCCESS” }</p> <p><b>Example:</b>  API Request: http://api.mettl.com/v1/schedules/op687f93ce/candidates/albert@g.com?ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xx}</p> <p>Output: Test report/result details corresponding to <a href="#">albert@g.com</a> deleted.</p>																							

If the request is invalid, the response will be:

```
{ "status": "error",  
  "error": { "code": Error-Code ,  
            "message": Error-Message }}
```

The following are the error codes specific to this API Request:

Error-Code	Error-Message
E002	Invalid access-key
E004	Invalid format for email-id
E005	Test is in progress, cannot be deleted
E006	Report does not exist
E009	Invalid Email

[For the mapping of common error-codes and messages, see "Error Handling".](#)

## 7 Get all details for a particular candidate

Request URL	http://api.mettl.com/v1/candidates/{candidate-email-id}																									
Method	GET																									
Arguments	<table border="1"> <thead> <tr> <th>Name</th> <th>Mandatory</th> <th>Default</th> <th>Allowed Values</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>qr</td> <td>No</td> <td>false</td> <td>true, false</td> <td>Set true if you want to receive responses for essay questions, set for manual grading.</td> </tr> <tr> <td>ts</td> <td>Yes</td> <td>-</td> <td>current time-stamp</td> <td>For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a></td> </tr> <tr> <td>ak</td> <td>Yes</td> <td>-</td> <td>Client's API key</td> <td>Unique API Key is assigned to the client on registering for using Mettl APIs</td> </tr> <tr> <td>asgn</td> <td>Yes</td> <td>-</td> <td>Generated request signature</td> <td>For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a></td> </tr> </tbody> </table> <p><b>Example:</b>            API Request: http://api.mettl.com/v1/candidates/albert@g.com?ts=1365740665&amp;ak={xxxxxxxxxxxx}&amp;asgn={xx}</p> <p>Output: All details for a particular candidate are returned.</p>	Name	Mandatory	Default	Allowed Values	Description	qr	No	false	true, false	Set true if you want to receive responses for essay questions, set for manual grading.	ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>	ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs	asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>
Name	Mandatory	Default	Allowed Values	Description																						
qr	No	false	true, false	Set true if you want to receive responses for essay questions, set for manual grading.																						
ts	Yes	-	current time-stamp	For details on the format of the timestamp refer to <a href="#">"Security and Authentication"</a>																						
ak	Yes	-	Client's API key	Unique API Key is assigned to the client on registering for using Mettl APIs																						
asgn	Yes	-	Generated request signature	For details on "Signature Generation" refer to <a href="#">"Security and Authentication"</a>																						
Response	JSON containing all details for a particular candidate <pre> {"status": "SUCCESS" "testInstances": [   { "registrationDetails": {&lt;&lt;&lt;&lt; Detailed Registration fields as described in API 6.2&gt;&gt;&gt;&gt;   },   "assessmentId": 6206,   "assessmentDuration": 20,   "assessmentName": "chota cs",   "assessmentStatus": "active",   "scheduleStatus": "active",   "accessKey": "o19236068",   "scheduleTitle": "first",   "test-status" : {&lt;&lt;&lt;&lt; Detailed Test Statuses as described in API 6.2&gt;&gt;&gt;&gt; }},   { .....},   { .....} ]}           </pre>																									

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If the request is invalid, the response will be:

```
{ "status": "error",  
  "error": { "code": Error-Code ,  
            "message": Error-Message }  
}
```

The following are the error codes specific to this API Request:

Error-code	Error-Message
E004	Invalid format for email-id
E009	Invalid Email

[For the mapping of common error-codes and error-messages, see "Error Handling".](#)

## 8 Results

### 8.1 Get results of all tests conducted in a schedule

The [API 6.2](http://api.mettl.com/v1/schedule/op687f93ce/candidates) (<http://api.mettl.com/v1/schedule/op687f93ce/candidates>) described above sends the results of candidates if their test has been completed or has expired.

### 8.2 Get results of a candidate's test conducted in a schedule

The [API 6.3](http://api.mettl.com/v1/schedule/op687f93ce/candidate/albert@g.com) (<http://api.mettl.com/v1/schedule/op687f93ce/candidate/albert@g.com>) described above sends the results of a particular candidate if his/her test has been completed or has expired.

### 8.3 Get PDF report of a candidate's test conducted in a schedule

The [API 6.3](http://api.mettl.com/v1/schedule/op687f93ce/candidate/albert@g.com) (<http://api.mettl.com/v1/schedule/op687f93ce/candidate/albert@g.com>) described above sends the results along with a link to download PDF report of a particular candidate if his/her test has been completed or has expired. The PDF report can be fetched using a wGet call or the link can be shared with the candidate directly.

## 9 Error handling

In the event an **error** is encountered while processing an API Request received from a client, Mettl API returns the following output:

If the request is invalid, the response can be:-

```
{ "status": "error",
  "error": { "code": Error-Code,
            "message": Error-Message }}
```

Following are the Error-Codes and Error-Messages that are returned in the event of an error:

Error-Code	Error-Message
E400	Request was not well-formed/Invalid parameters supplied.
E401	Authentication failed/Signature mismatch
E403	Access denied. The API key is not authorized for requested resource/action.
E404	Requested resource not found.
E405	HTTP Method not allowed for this API Request
E408	Request Timed out
E422	Signature expired.
E503	API Service is currently unavailable
E504	Invalid Timestamp
E509	Rate limit exceeded

In addition, the error codes specific to individual API Request Types are mentioned in the respective sections.

## 10 Security and Authentication

### 10.1 Authentication Parameters

All API Requests are required to send 3 mandatory parameters *ak*, *ts*, *asgn* (in addition to the other parameters, specific to the request) which are used to authenticate the request before the output can be served.

Authentication Parameter	Description
Ak	This is the API Public KEY obtained by the client on registering for using Mettl APIs
Ts	This is the UNIX Timestamp ( <i>the number of seconds between a particular date and the Unix Epoch</i> ) UTC Time zone
asgn	HMAC-SHA1 encoded string

### 10.2 Signature Generation

The *asgn* to be sent as a parameter along with an API Request must be computed using these steps:

1. Concatenate the API Request components strictly in the order specified below:

**Concatenated string** = HTTP Verb + API URI + request-parameters (including 'ak' & 'ts') sorted in ascending order alphabetically according to the name of the parameters

*Example:* "GET" + "http://http://api.mettl.com/v1/assessments/2690" + "\n" + "a34e2ejf38ek39fkwmf" + "\n" + "50" + "\n" + "1366020643"

HTTP Verb	GET
API URI	http://http://api.mettl.com/v1/assessments/2690
API Public Key	a34e2ejf38ek39fkwmf
Limit	50
timestamp	1366020643

2. Encode the string obtained above using the **API Private\_Key** (obtained at the time of registration) with HMAC-SHA1 algorithm to obtain the signature.

*SIGNATURE* = URLENCODE(BASE64\_ENCODE(HMAC-SHA1(Concatenated string, Private\_Key)))

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For Example:

Sample PHP Code:

```
$signature = rawurlencode(base64_encode(hash_hmac("sha1", $concatenated_string, $private_key, true)));
```

### 10.3 Sending API Request

The API Request comprising the signature should now be sent for processing using the HTTP method/verb (GET/POST/PUT/DELETE) designated for that API.

### 10.4 Authentication

On receiving an API Request, Mettl Server will follow these steps (in order) to authenticate the request:

- a. **Timestamp Validity:** Check the validity of timestamp (sent as a parameter) by ensuring that the difference between the current server timestamp (UTC time zone) and the supplied timestamp is within 1 day. Unsuccessful validation results in rejection of the request with Error: Invalid Timestamp (E504).
- b. **Signature Validation:** If the timestamp is valid, an attempt is made to re-generate the signature using method as described in "Signature Generation". If the signature re-generated by the server matches exactly with the one supplied along with the API Request, the signature is considered valid. Unsuccessful authentication results in rejection of the request with Error: Authentication failed/Signature Mismatch (E401)
- c. **Signature Expiry:** Every valid signature is verified if it has been used previously for another Request. In case the signature matches with any of the previously used signatures, the request is rejected with Error: Signature expired (E422). Otherwise, the request is considered valid & will be processed based on the parameters of that request

### 10.5 From where can I get API Public & Private Keys?

Please contact your Mettl Account/Sales manager to get Public & Private keys for your Mettl account. Or you can send an email to [support@mettl.com](mailto:support@mettl.com), someone among us will help you out.

## 11 Sample Application

Let us assume, you have a portal where students register for learning a particular skill (example, **Business Financial Valuation**). You have made 2 assessments on Mettl, one free for all & the other one which only paid users can take. Details of these assessments are -

1. Assessment - 'Free Test for Financial Valuation', Schedule ID – op890df79
2. Assessment - 'Paid Test for Financial Valuation', Schedule ID – op888qzr0

When a student (say [albert@g.com](mailto:albert@g.com) type: Paid), logs in to his account on your portal. You'll want to show the test(s) that he can take or if already taken, you may want to show his report. You can perform the following simple steps to achieve this flow –

1. Call API to get all schedule details in your account - <http://api.mettl.com/v1/schedules> (GET). This API will send 2 schedules as a JSON response along-with test URLs
2. From assessment name you figure out that only schedule op888qzr0 is applicable to Albert.
  - a. **Please note** we'll soon add facility to add Labels to an assessment or schedule to make this step simpler.
3. Check whether this user has already taken this test or not using API
 

<http://api.mettl.com/v1/schedules/op687f93ce/candidates/albert@g.com> (GET)

  - a. If the above API returns the "test-status" as "to-be-taken", then auto register Albert for this test using the API with Albert's login details in POST arguments
 

<http://api.mettl.com/v1/schedules/op687f93ce/candidates/> (POST)
  - b. If the registration API is successful, show the link returned by Mettl (example, <http://tests.mettl.com/take-test?ec=ttur990dqvx>). Else, you may want to show an appropriate response to the student. When Albert clicks on this link, he'll be directly taken to the Test Instructions page, where he can start taking this test.
  - c. Else if the test status returned is "completed", this student has already taken this test, and you may want to show him the results of his test or allow him to download the pdf report. Both these actions can be completed using the response of the API.
  - d. Else if the test status returned is "in-progress", this test is already in progress, and you may show him an appropriate message. Example, "Your test is already in Progress"
4. Delete the test report/results data for a particular candidate for a particular schedule Id:
 

<http://api.mettl.com/v1/schedules/op687f93ce/candidates/albert@g.com> (DELETE)

  - a. If the candidate has already **completed** the test or the test has **expired**, the above API call will cause the deletion of the test details for the candidate [albert@g.com](mailto:albert@g.com) for the schedule Id op687f93ce.
  - b. In case, the test is **in-progress** the API call will return an error with the message that the "Test is in progress, cannot be deleted".

---

## End of Mettl's API Document

Please contact us on [support@mettl.com](mailto:support@mettl.com) for any queries.

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