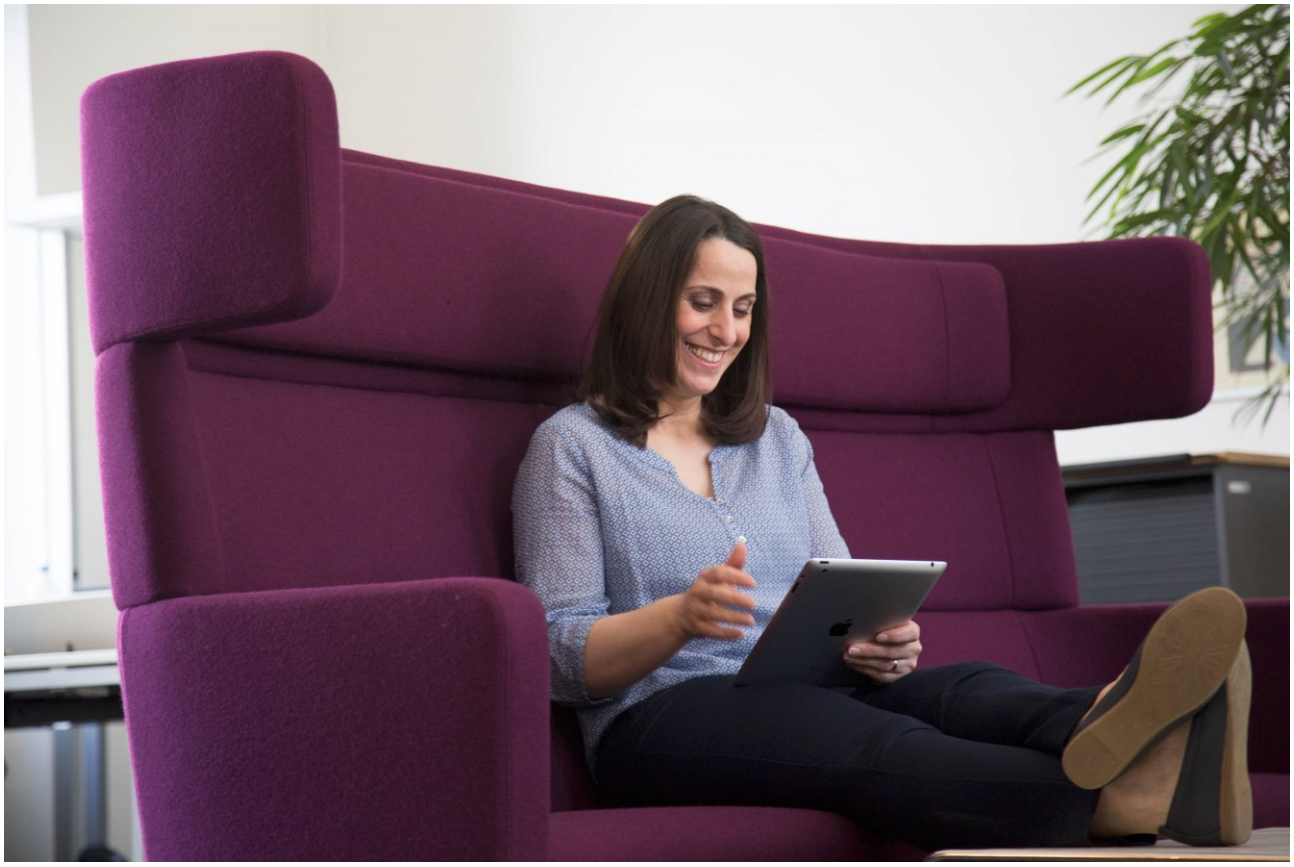
tts performance suite

Best Practice Guidelines

HTML5 CONFIGURATION

BEST PRACTICE: HTML5 configuration



These guidelines provide an overview of the issues that have to be considered when creating a HTML5 configuration for tts performance suite. This document primarily deals with the advantages of a HTML5 configuration for mobile learning.

Contents

1 Objective

These guidelines not only define the parameters for creating a HTML5 configuration, but also contain general recommendations. The HTML5 configuration acts as a foundation for the creation of mobile-friendly e-learning lessons with tts performance suite. Needless to say, the resulting learning content is also fully PC compatible. This means that your users get to enjoy all the benefits of a HTML5 configuration even when learning on a PC. The information below explicitly focuses on the mobile deployment scenario.

The creation of a HTML5 configuration is a customer-specific project which our Professional Services (PS) Consultants will be happy to do on your behalf. This means that the design and functionality will be specially adapted to suit your requirements. The PS Consultant will coordinate with you regarding the parameters and then create an individualized client configuration. This usually also encompasses an adaptation – or creation – of SmartComponents.

In addition to mobile-friendly e-learning, it is also possible to ensure that the tts performance suite WebAccess can be accessed via mobile devices. However, this White Paper solely deals with the creation of a HTML5 configuration for the production of e-learning content. WebAccess customization to enable mobile access can be carried out by the PS Consultant, but this document does not cover this.

2 The essentials

2.1 Creating content

When creating content, you first have to ensure that it has been explicitly designed to suit the target scenario. Mobile learning is one of the possible deployment scenarios. In this scenario, the target devices on which content is to be subsequently viewed is one of the main issues that have to be clarified. After all, the resolution of devices, such as tablets or smartphones, impacts on the ultimate presentation of content. But there are also other considerations, such as the length of time users are expected to spend learning on the respective device or the level of attention users usually dedicate to the device. The desired content therefore has to be tailored to suit these conditions.

tts performance suite can create the following types of content:

- e-learning created with tts performance suite (HTML5 export)
  Both lesson modes are supported: Study and Assessment mode.
  Only the *Free browsing* mode is available in the Assessment mode. All other modes are currently not supported. Please also refer to the 'Best Practice guidelines for the creation of HTML5 content'.
- HTML documentation created with tts performance suite
- Static documents that can be displayed on mobile devices, e.g. PDF files, …
- Videos

2.2 Publishing content

WebAccess scenario

The WebAccess of tts performance suite can be accessed via mobile devices. tts recommends a separate portal configuration to facilitate mobile access to content. As mentioned above, this customization is carried out by the PS Consultant.

WBT

Content can be published as a stand-alone WBT. The distributor may need to be adapted for the creation of WBTs in order to ensure that they optimally run in a mobile environment (portal templates).
End users can subsequently view the WBT via

- a portal
- an LMS (by importing the SCORM package).

Stand-alone lesson (an e-learning unit)

Publishing as a stand-alone lesson is also an option. The export of a TT document (e-learning) can be started from an LMS or a portal.
It's possible to transfer the learning progress data via SCORM whenever a stand-alone lesson has been imported into an LMS.

Process or Topic view

The Process and Topic views in tts performance suite can also be exported. This may necessitate an adaptation of the portal templates in order to ensure that the pages are optimally suited to a mobile environment.
End users can subsequently access the respective view via

- a portal
- an LMS.

2.3 Creating a client configuration

e-learning content is produced with a client configuration that has been optimized for HTML5 content. This configuration includes the following settings:

WYSIWYG view in the authoring environment:
Internet Explorer is used for the WYSIWYG view in the authoring environment. The compatibility mode has to be set if using an embedded Internet Explorer. A HTML5 configuration should be used in conjunction with the compatibility mode for IE9.

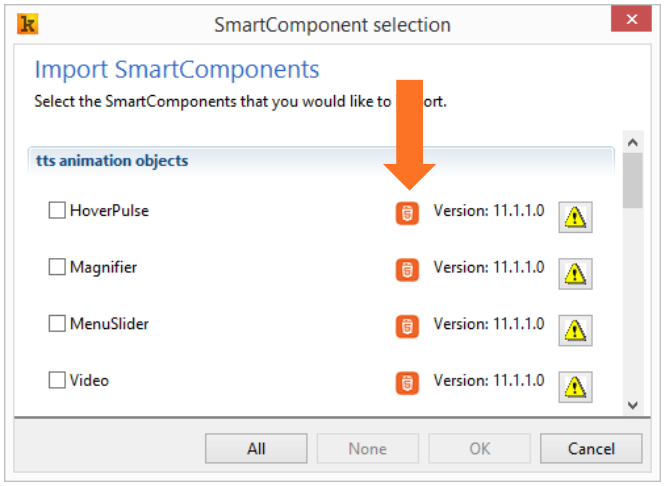
Please note: In conjunction with Release 2022r2, the Producer user interface has now been modified to gray out the buttons for functions that are not supported in HTML5 documents (example: parallel paths). This makes it easier to quickly identify the functions that can actually be used.

HTML export:
It's possible to publish documents in the standard tts performance suite player (HTML Player). In this case, we recommend setting the 2014 mode as the mode for the HTML Player.
The IE9 mode can also be set for Internet Explorer, depending on the target group. However, this means that SmartComponents can then only use the HTML5 and CSS3 functions supported by the IE9 compatibility mode.

HTML5 export:
No settings have to be made in the HTML5 Player.

2.4 Using SmartComponents in the client configuration

The use of SmartComponents enhances the range of functions available in an e-learning and opens up a whole new world of creative opportunities based on state-of-the-art technology. SmartComponents combine design and tailored functionality, meaning that content can be produced much more efficiently than with a one-fits-all solution. The SmartComponent API in tts performance suite is an interface which is optimally suited to the implementation of customer-specific requirements. If you would prefer to outsource the creation of SmartComponents, your PS Consultant or the tts E-Learning Team would be more than happy to do this on your behalf.
The use of SmartComponents is not absolutely necessary when creating a HTML5 configuration. However, certain additional functions in the HTML5 Player – such as the creation of test questions or interactive buttons for tutorial control – only work with SmartComponents.
If SmartComponents are used, they have to be developed for both the HTML and HTML5 Player. The reason why they are necessary in the HTML Player is that it would otherwise be impossible to display and edit the components in the authoring environment.
When exporting and importing SmartComponents, the red icon indicates that the respective component can also be used in the HTML5 Player.



Your own SmartComponents are not covered by the tts performance suite maintenance contract – with the exception of components from the tts SmartComponent Library.
(Please refer to the product description for the tts SmartComponent Library.)
Further information on SmartComponents and a download option for the tts SmartComponent Library can be found in the product documentation. You will find this for each release in the "Mobile, HTML5 Player and tts SmartComponents Library" section under "SmartComponents Library and SmartComponents API".

2.5 Navigation

We recommend the standard HTML5 Player navigation. This navigation method supports a move from one page to the next:

- by swiping
- via the 'left arrow' or 'right arrow' buttons.

It's also possible to use the Next and Back components from the tts SmartComponent Library to move about within an e-learning. We therefore recommend including these components in the step templates of the HTML5 configuration.

It's also possible to use the Next and Back functions via the control triggers in tts performance suite. To find out more, please refer to the White Paper titled 'Best Practice guidelines for the creation of HTML5 content' or simply ask your PS Consultant.

Elements such as the sitemap, glossary or Help function are not yet available.

The HTML Player's tutorial control should always be hidden in the document template, or in the settings for the actual document or in the current page template.

2.6 Resolution and aspect ratio

Experience shows that it's a good idea to adapt both the design of the portal and of the lesson to an aspect ratio of 4:3 and a resolution of 1024x768.
However, these specifications depend on the mobile devices to be used by the target group and may therefore vary from case to case. After all, smartphones usually operate with an aspect ratio of 16:9, whereas tablets use 4:3.

3 Step templates

Step templates can be structured in the regular manner. When doing so, please also refer to the information in the White Paper titled 'Best Practice guidelines for the creation of HTML5 content'.

4 Test questions

4.1 Test question elements

Since the test question function in the HTML5 Player relies on SmartComponents, test questions for the HTML5 export therefore have to be created exclusively with the help of SmartComponents. The tts SmartComponent Library includes the following components:

- Single-choice / Multiple-choice
- Drag&Drop

You also need an Evaluation button, which is also part of the tts SmartComponent Library. This button allows the learners to evaluate their answer to a quiz question.

4.2 Feedback for users

It's possible to give the users feedback while they are answering a question. The following components can be used:

- The e-learning context can be recreated via the *Qualified feedback* SmartComponent. This component can be used to provide individualized feedbacks (text and graphics). Text can be entered into the component. Graphics or other elements can be assigned as child elements.
- The *Comment* SmartComponent displays the Comment text for the test question page. A test question's Comment text and all associated instruction text cannot be edited in the actual component. They are stored in the quiz page and can be adapted via the *Edit feedbacks* function in the Document Editor.

The instructions may need to be individually adapted to suit the various test questions due to the fact that the standard AutoTexts are not always suitable for every type of question. This can be easily done by editing the corresponding AutoTexts in the respective step template.

- The *Feedback* SmartComponent displays the global feedbacks for the particular test question. It is also impossible to edit these texts within the actual component. They are stored on the quiz page and can be adapted via the *Edit feedbacks* function.
  Here it may also be necessary to adapt the feedback since the standard AutoText is not always suitable for every type of question.

4.3 Quiz evaluation

There are two evaluation components:

- Tabular evaluation of all quiz questions
  The tabular evaluation can be used either as a final quiz evaluation or as an interim evaluation. The latter option always only shows the results for the test questions that have already been answered (please refer to the Help function in the component).
- Overall result
  A progress bar displays the total score achieved for all the test questions that have been answered.

4.4 Creating templates for test questions

Please note that the author authorization can also be set for the SmartComponent settings. As things currently stand, only the technical names of the settings are displayed in the authorizations.

5 Video

The *Video* SmartComponent is used to integrate videos into an e-learning. This component is also available in the tts SmartComponent Library.

6 Creating your own SmartComponents

It's possible to create your own customized SmartComponents when generating a HTML5 configuration. These are integrated into the software via interfaces and can be developed regardless of the release cycle of the tts performance suite.
Documentation on the SmartComponent API can be found here.
Further information on SmartComponents can be found in the product documentation for each release in the “Mobile, HTML5 Player and tts SmartComponents Library” section under “SmartComponents Library and SmartComponents API”.