



SATERN

System for Administration, Training, and Educational Resources for NASA

Developing Custom Content in SATERN

*2008 SATERN Administrator Summit
Wallops Flight Facility – Wallops Island, VA*

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Session Objectives

At the end of the session, participants will:

- Know what online custom content is
- Be familiar with the requirements for online content
- Be familiar with the general process of placing online content into SATERN
- Know some of the configuration options available
- Know how the SATERN Content Development Team can help them with their online content
- Be familiar with some of the costs involved



Agenda

- Overview
- Rules and Requirements for SATERN
- General Process for Online Content
- Configuring Online Content
- SATERN Content Development Team
- Costs
- Summary
- Questions



Developing Custom Content in SATERN

What is Online Custom Content?

What is Online Custom Content?

Online custom content usually refers to:

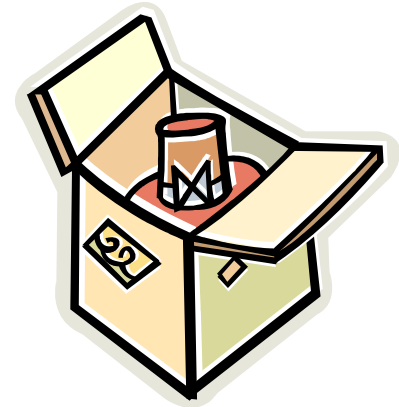
- Online Training Courses
- Training Validations
- Tests/Exams
- Course Evaluations
- Supporting Documents



What is Online Custom Content?

You can configure your online content by using:

- Items
- Content Objects
- Exams
- Documents





Developing Custom Content in SATERN

Rules and Requirements

Rules and Requirements

All SATERN online custom content must:

- Meet SATERN Requirements
- Be Section 508 Compliant
- Meet NASA Internet Publishing Guidelines
- Be SCORM Conformant
- Have a Subject Matter Expert assigned



Rules and Requirements

SATERN Requirements:

- Must be accessible on Windows platforms using Internet Explorer 6 and Mozilla 1.7*
- Must be accessible on Mac OS X platforms using Safari 1.2 and Mozilla 1.7 *
- Must be coded in a format supported by SATERN
- Must meet other standards

* Mozilla and Firefox are not the same! Firefox 2 is equivalent to Mozilla 1.7.

Rules and Requirements

SATERN Requirements:

Supported Formats:

- Flash
- DHTML
- JavaScript
- MP3 Audio
- RealAudio/RealVideo*
- Shockwave
- Windows Media Player Video

Unsupported Formats:

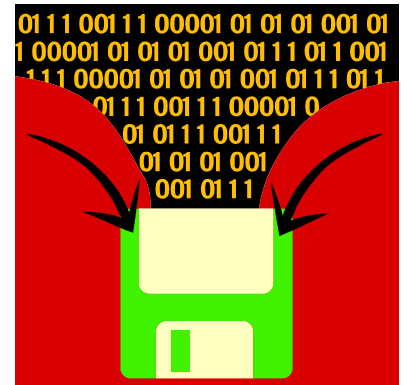
- Adobe Authorware
- ASP
- ColdFusion
- JSP
- PHP

** If located on a non https:// server*

Rules and Requirements

Other Standards:

- Content should be self-contained
- Files should not contain spaces
- Links to websites outside of the training should open a new browser window
- Avoid horizontal scrolling





Rules and Requirements

Section 508 of the Rehabilitation Act:

- NASA Section 508 Web Policy
 - All NASA Websites are required to meet Section 508 Standards
 - Provide a reasonable accommodation to impaired viewers
- Portions of Section 508 that most pertain to online content
 - 1194.22 – *Web-based Internet and Internet Information and Applications*
 - 1194.24 – Video and Multimedia Products



Rules and Requirements

NASA Internet Publishing Guidelines (NPR 2810.1A)

- Found in Section 11.3.9
- Controls what types of information may be put on a publicly accessible website
- SATERN is not necessarily a public website, but precautions should still be taken to protect information in your content.



Rules and Requirements

SCORM (Sharable Content Object Reference Model)

- Designed by Advanced Distributed Learning (ADL)
- A way to package your content to make it easier to share with other Learning Management Systems
- SATERN is SCORM 1.2 conformant
- SATERN implements SCORM using Java applets and JavaScript
- Allows the course to pass data to SATERN which can be utilized later



Developing Custom Content in SATERN

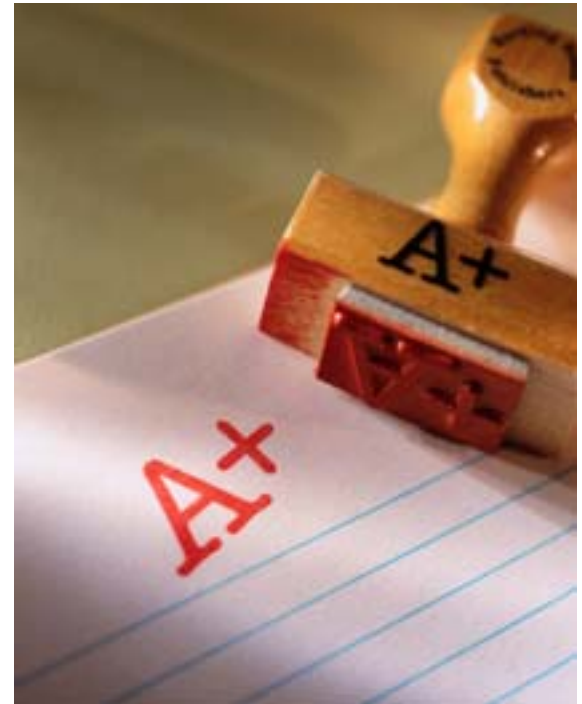
General Process for Implementing
Online Custom Content

General Process for Implementing Online Custom Content

Tests / Exams

You can attach an exam object to any training object.

- Determine if you want to have any objectives
- Compose your questions and answers in a text editor
- Determine how many questions you want on the test
- Decide the test pass criteria
- Send everything to the SATERN Content Development Team



General Process for Implementing Online Custom Content

Supporting Documents

Supporting documentation can be attached to online and instructor-led training.

- Make sure your documentation is Section 508 compliant
- Send your documents to the SATERN Content Development Team
- Documents appear in the 'Related Documents' section of the Item Details page

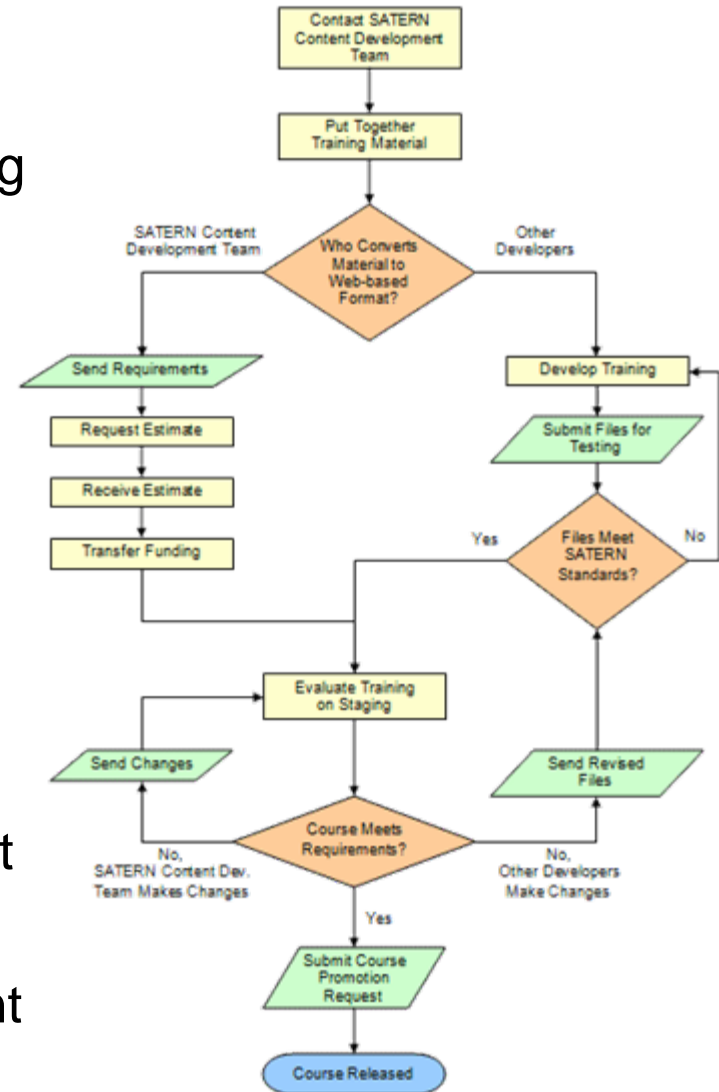


General Process for Implementing Online Custom Content

Online Training Content

The process for developing online training varies for almost every course.

- Contact the SATERN Content Development Team if you have questions
- Plan out your training
- Determine if you want audio/video
- Decide if you want an exam or not
- Choose how you want to convert the material to a web-based format
 - Your own developers
 - SATERN Content Development Team





General Process for Implementing Online Custom Content

Online Training Content

If your developers convert your material to a web-based format:

- Make sure that they know the SATERN regulations
- Evaluate their work to make sure it meets your requirements.
- Send the 'final' version to the SATERN Content Development Team
 - Training will be evaluated for Section 508 and SCORM
 - If not conformant, a report will be provided of problem areas



General Process for Implementing Online Custom Content

Online Training Content

If choose the SATERN Content Development Team to convert your material to a web-based format:

- Contact the team: MSFC-DL-Satern-Courses@mail.nasa.gov
- Provide a copy of your training
- Provide your requirements
- Request an estimate



General Process for Implementing Online Custom Content

Online Training Content

When your training meets the SATERN regulations, it will be loaded to the SATERN Staging server

- Test it to make sure that it works the way you want
- Try different configurations
- Make revisions to your material
- You may have multiple people evaluating your training



General Process for Implementing Online Custom Content

Online Training Content

Once you are happy with the training
it will be moved to the Production server
and made available to learners.



Developing Custom Content in SATERN

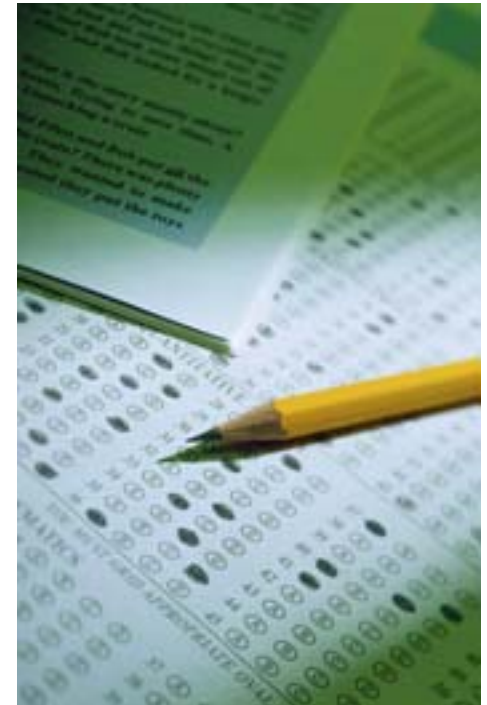
Configuring Online Custom Content

Configuring Online Custom Content

Tests / Exams

You have many options available when configuring a SATERN exam object:

- Objectives
- Question Pool
- Pass Percentages for exam and objectives
- Allow access to online training content during exam
- Allow an exam pass to grant credit for entire course
- Allow learner to review missed questions
- Provide custom messages to learner at certain points in the exam



Configuring Online Custom Content

Online Training

You can configure your online training item as well:

- Force learners to take objects on Content Structure page in order
- Arrange objects in the order that you wish
- Choose which catalog the course should be in
- Choose what subject area(s) you want the course in
- Assign the mandatory Subject Matter Expert
- Specify a target audience
- Assign goals to the training
- Set a retraining period for the course

Note: If you do not have a SATERN exam object as part of your training item, all the objects become required components of the course and must be completed for credit to be given to the learner.



Developing Custom Content in SATERN

Updating Online Custom Content After
It Has Been Released

Updating Online Custom Content after Release

You can make modifications to your online content after it is released to learners.

- Determine who you want to make the updates
 - Your own developers
 - The SATERN Content Development Team
- Send revisions to the SATERN Content Development Team for Section 508 and SCORM testing
- Decide if you want to review the changes before they are released to learners

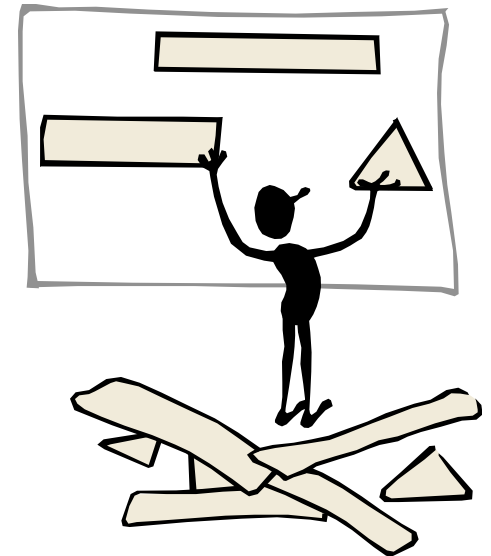


Updating Online Custom Content after Release

Revisions

SATERN Items can be revised and given a new date/time stamp and/or revision number

- Pros:
 - Allows you to see which version of training a learner has taken
 - Automatically update learning plans and curriculums
- Cons:
 - Does not remove the old revision from learning plans
 - Makes reporting slightly more complicated





Developing Custom Content in SATERN

How the SATERN Content
Development Team Can Help

How the SATERN Content Dev. Team Can Help

We're here to assist you in getting your training materials into SATERN. We can:

- Answer any online content related questions
- Convert material into a web-based format
- Fix Section 508 issues
- Fix SCORM issues
- Scan for Section 508/SCORM conformance
- Generate SATERN exams
- Transfer courses/exams/documents to SATERN
- Load and configure courses/exams/documents





Developing Custom Content in SATERN

Potential Costs

Potential Costs

From the SATERN Content Development Team:

- Converting material to web-based format
- Making extensive revisions to a course
- Fixing Section 508/SCORM issues
- Video format conversions
- Generating a SATERN exam
- Scanning for Section 508/SCORM conformance

External Costs

- Development costs from other developers
- Audio/Video recording
- Streaming server hosting





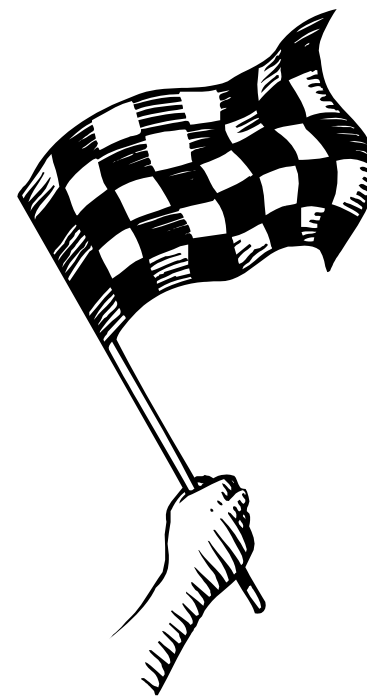
Developing Custom Content in SATERN

Summary



Summary

- Online custom content can be training, evaluations, exams, and documents
- Requirements: Section 508, SCORM, NASA, SATERN
- General Process: Contact the SATERN Content Development Team
- Multiple ways to configure training and exams
- SATERN Content Development Team can help you
- There may be some costs involved





Questions?

Visit our Website:

<https://satern-courses.msfc.nasa.gov>

E-mail Us:

MSFC-DL-Saturn-Courses@mail.nasa.gov

