



**World Exposition Shanghai China 2010
Expo Shanghai Online**

**QUICK MANUAL FOR
DEVELOPMENT AND CONSTRUCTION OF THE
EXPERIENCING PAVILION**

1st Edition

Bureau of Shanghai World Expo Coordination

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1. Purpose

By excerpting and recomposing the relevant contents of *Guide for Development and Construction of the Experiencing Pavilion* (hereinafter referred to as *Guide*), and the *Suggestions for Development and Construction of the Experiencing Pavilion* (hereinafter referred to as *Suggestions*), this document highlights the key points and matters of attention over the development process of the Experiencing Pavilion, and serves as a quick manual and the index for Participants to access the construction requirements of the Experiencing Pavilion.

2. Flow Chart for Virtual Pavilion Development

The development process of the Experiencing Pavilion is shown below. Tasks for the Organizer and the Participant are listed apart:

Phase	Organizer's Task	Participants' Task
Platform construction	Hardware and network equipment and buildup	
	Development of the basic platform functions	
Experiencing Pavilion Construction		Selection of developer(s)
		Compilation of <i>Online Pavilion Exhibition & Construction Proposal</i>
	Construction of pavilion external appearance	Submission of content materials for the online pavilion appearance
		Development and construction of the online pavilion
Operation and Maintenance	Integration of complete updated package of online pavilion construction outcomes	Submission of the package of online pavilion construction outcomes
	Complete updated package of online pavilion construction outcomes	Submission of <i>Application Form for Online Pavilion Updates</i> ; Submission of complete updated package of online pavilion construction outcomes;

3. An Index to Technical Documents

The table below lists Participants' tasks, the key points and the corresponding chapters and sections where the relevant details can be found:

Tasks	Key Words	Excerpts	Reference
Compilation of Online Exhibition and Construction Proposal	Online Pavilion Exhibition & Construction Proposal	<p>(1) Participants shall submit <i>Online Pavilion Exhibition and Construction Proposal</i> before July 31st, 2009 via express delivery or network.</p> <p>(2) The proposal shall include the developer information, time schedule, exhibition theme, exhibition contents, technical notes, relevant links, content update plans, etc.</p>	Guide 5.2.2, 5.3.1, and Appendix B
Submission of content materials for pavilion appearance	File Package of Pavilion Appearance Materials	<p>(1) The pavilion appearances shall be constructed in for free based on the content materials provided by Participants. The appearance content materials shall be appropriately classified and packaged, and submitted via express delivery or network before July 31st, 2009.</p> <p>(2) The appearance content materials shall include the effect drawings (pixels \geq 1500 x1200 pixels, resolution \geq 150 dpi, in JPG, TGA and TIF format; from front, rear, both sides and the bird's eye view); CAD elevation of pavilion exterior, (in DWG; front, rear, both sides and the bird's eye view); CAD plan for pavilion interior (in DWG, plan for each floor, plan for external roof); façade texture maps (in JPG, \geq 2000 x1500 pixels; the original location of the texture shall be indicated); textual introduction of the pavilion; 3D model (in Max, SketchUp or DWG)</p>	Guide 5.3.2 and Appendix C
	List Of Content Materials for Online Pavilion Appearance	The content materials package shall include a list of the content materials files to illustrate the types, names, formats and paths of the involved files.	Guide 5.3.3 and Appendix C

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Tasks	Key Words	Excerpts	Reference
<i>Development and construction of the Experiencing Pavilion</i>	Server Hardware Configuration	The hardware configurations of the standard server <ul style="list-style-type: none"> ● Standard rackmount server; ● 1 Intel 4-kernel Xeon CPU, X3210, 2.13 GHz; ● Gigabit Ethernet card; ● 8G ECC memory; ● 1×160G SATA hard disk. 	Guide Appendix A.1.1
	Server Software Configuration	Expo Online platform provides neither database support, nor integration of software in any form, including database and middleware form any third party.	Guide Appendix A.1.2
	Client Computer Configuration	The minimum client computer configurations: <ul style="list-style-type: none"> ● CPU: PIII 800M CPU or equivalent; ● Memory: 512M; ● VGA Cards: Integrated video adapter for DirectX8 ● Hard Disc: 5G free space or above Recommended hardware configuration: <ul style="list-style-type: none"> ● CPU: PIII 1G CPU or above; ● Memory: 1G; ● VGA Cards: Stand-alone video adapter with 64M video memory, which supports DirectX8 and hardware acceleration ● Hard Disc: Above 10G free space. Operating system: Windows 2000/XP/Vista.	Guide Appendix A.1.3
	Client Screen Resolution	The best screen resolution for all Expo Online web pages is 1024*768. At this resolution, all pages should avoid horizontal scroll bars. When the client screen fails to meet the best resolution, the Expo Shanghai Online system platform and all online pavilions should still be able to be browsed properly.	Guide Appendix A.1.4
	Client Browser	<ul style="list-style-type: none"> ● IE 6.0 or above ● Other browsers with IE-core, ● Mozilla Firefox 2.0 or above 	Guide Appendix A.1.5

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Tasks	Key Words	Excerpts	Reference
Development and construction of the Experiencing Pavilion	Browser Plug-Ins	Flash and 3DVIA Player browser plug-ins are recommended for development and construction of Experiencing Pavilions.	Guide Appendix A.1.6
	Client Network Environment	Network speed ≥ 256 kbps should be sufficient for users' proper access to the online exhibitions and basic functions of the Online platform and online pavilions, while a speed ≥ 512 kbps should ensure an easy and fast access.	Guide Appendix A.1.7
	Language	The text contents shall be provided in Chinese and English, and the third language shall be submitted in form of pictures.	Guide Appendix A.2.1
	Picture	The resolution of the static pictures shall be 1024 * 768 or lower when directly displayed on web pages and the size of a single picture shall be smaller than 200 Kb, in JPG, PNG and GIF.	Guide Appendix A.2.2
	Flash and The Player	The Flashes appearing in the pavilions submitted by Participants shall use ActionScript 3.0 or above versions as logic control, the file formats shall be SWF 9.0 or above versions, and SWF 8.0 or lower shall not be permitted for blended loading.	Guide Appendix A.2.3
	Video	The size of FLV, WMV and video system files recommended to be less than 100M, with duration within 30 minutes.	Guide Appendix A.2.4
	Audio	MP3 audio shall be monophony with bit rate < 128 Kbps	Guide Appendix A.2.5
	Web Page Size	The web page size of Experiencing Pavilions shall be 800*600 pixels.	Guide Appendix A.2.6
	Optimization with Flash-Frame	Pavilions developed with Flash can be optimized by reducing load of network, server and CUP as well as memory consumption.	Suggestions 2.3.1

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Tasks	Key Words	Excerpts	Reference
Development and construction of the Experiencing Pavilion	Optimization with Virtools-Frame	Pavilions developed with Virtools can be optimized from the aspects of model, scenario and network.	Suggestions 2.3.2
	Data Storage	All data required for online pavilion construction shall be stored on the platform built by the Organizer. Each Participant will be allotted with a 2G space for storage. The maximal size of any single file (excluding the video files) is 50M. The maximal size of any single video file is 200M.	Guide Appendix A.4.1
	Data Access Protocol	The standard HTTP protocol is the protocol for data exchange between the client and the platform. Data can be accessed by users from the platform. However, neither data upload nor data update from client's end is supported by the platform.	Guide AppendixA.4.2
	Data File Naming Rules	The data files shall be named with only lowercase letters (a~z), numbers (0~9) and the underline mark “_”. The file name and the suffix are separated with the punctuation mark.	Guide Appendix A.4.3
	Relevant Links	The LOGO and link of Participant's own website can be visible in the Experiencing Pavilion. Visibility of sponsor' LOGO, title and link is allowed; No other commercial advertisement is allowed.	Guide 6.2
Submission of package of online pavilion construction outcomes	Format of the Online Pavilion Construction Outcomes Package	(1) The Package should be compressed into the standard, non-encrypted ZIP or RAR file. The Package should be named “Online Pavilion ID Number.(zip or rar)”. (2) The Package should contain the Package index file, the Package searching file, and the Online Pavilion Construction Outcome files.	Guide Appendix A.3.1
	Specification for Index File of the Construction Outcomes Package	The index file must be included in the package, in the format of XML and named as “index.xml”, specifying the online pavilion ID number, file name, file directory, description file, etc.	Guide Appendix A.3.2

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Tasks	Key Words	Excerpts	Reference
Submission of package of online pavilion construction outcomes	Specification for Searching File of the Construction Outcomes Package	Submitted as an XML file and named as "key.xml". Information of each pavilion, exhibited item, news report and event is paired with a children node under the root node. Information of each node contains four fields: Type, Name, Summary and Searching Keyword.	Guide Appendix A.3.3
	Specification for Directory Topology of the Construction Outcomes Package	(1) Except the index file, index.xml; and the searching file, key.xml, no any other file is allowed to be located under the root directory. (2) Except the ssize, audio, flv, wmv and lsize directories as specified by the Organizer, no any other directory is allowed to be created under the root directory. However, subdirectories can be created under the designated directory. The newly created subdirectory should be named with lowercase letters (a~z), numbers (0~9) and the underline mark (); (3) Files in the same subdirectory, under the ssize, audio, flv, wmv and lsize directories specified by the Organizer can be accessed via relative path. Files in the different subdirectories should be accessed via absolute paths.	Guide Appendix A.3.4
	Pre-Launch, Integration and Activation	The Organizer deploys the construction outcomes into the pre-launch environment. Online pavilion will be officially launched on May 1 st , 2010 after confirmation and approval by the Participant and the Organizer.	Guide 5.2.4 & 5.2.5
	Confirmation Sheet for Online Pavilion Launch	The Participant confirms the pre-launched online pavilion by filling and submitting the "Confirmation Sheet"	Guide 5.2.4 & 5.3.5

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Tasks	Key Words	Excerpts	Reference
Application Form for Online Pavilion Updates & the Complete Updated Package of Online Pavilion Construction Outcomes	Content Update	Updated contents includes video, audio, text, pictures, etc, as a part of the package of outcome files. There there is need to update news and announcements, the participant can contact with the Organizer.	Guide 5.2.7
	Turnaround Time For Update	The updated contents, submitted in correct and perfect standard, will be deployed to the pre-launch environment in seven days; and will be officially launched in two days after confirmation between the participant and the Organizer.	Guide 5.2.7
	Update Method	A complete package containing all relevant outcome files should be submitted, in which the updated content have already substituted the original old files.	Guide 5.2.7
Miscellaneous	Commercial Activities	As the World Expo is in nature an operation for public interest and due to the special nature of the Internet, commercial activities in relation to Expo Shanghai Online are restricted to a certain extent. Where commercial activities are involved, the Participant shall promptly consult the Organizer and proceed only upon written consent from the Organizer.	Guide 6.1
	Intellectual Property Rights	As part of the World Expo 2010 Shanghai China, Expo Shanghai Online shall follow the general rules of the World Expo 2010 Shanghai China as well as <i>Participation Guide</i> , <i>General Regulations</i> and <i>Special Regulations</i> released by the Organizer.	Guide 6.3